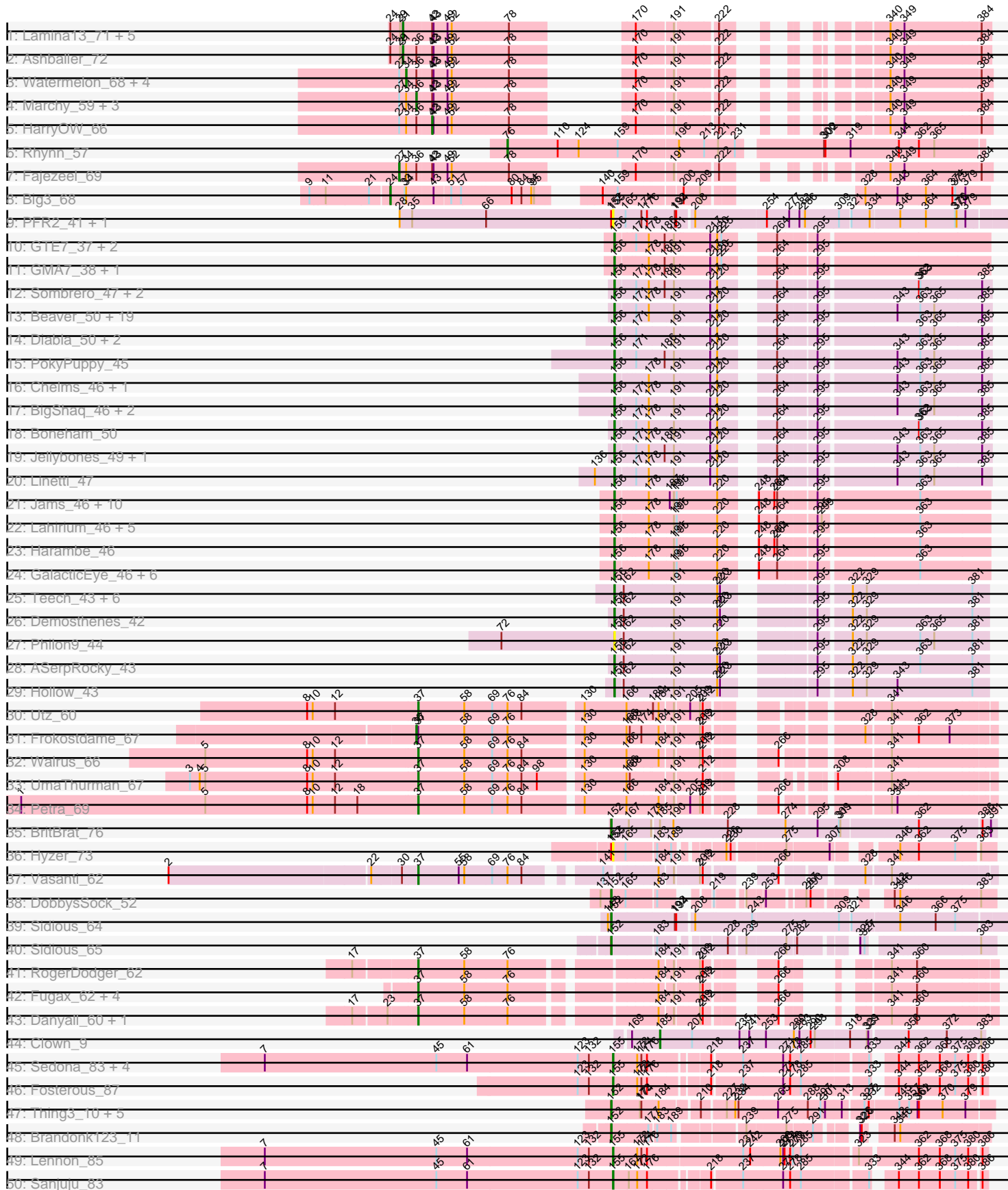
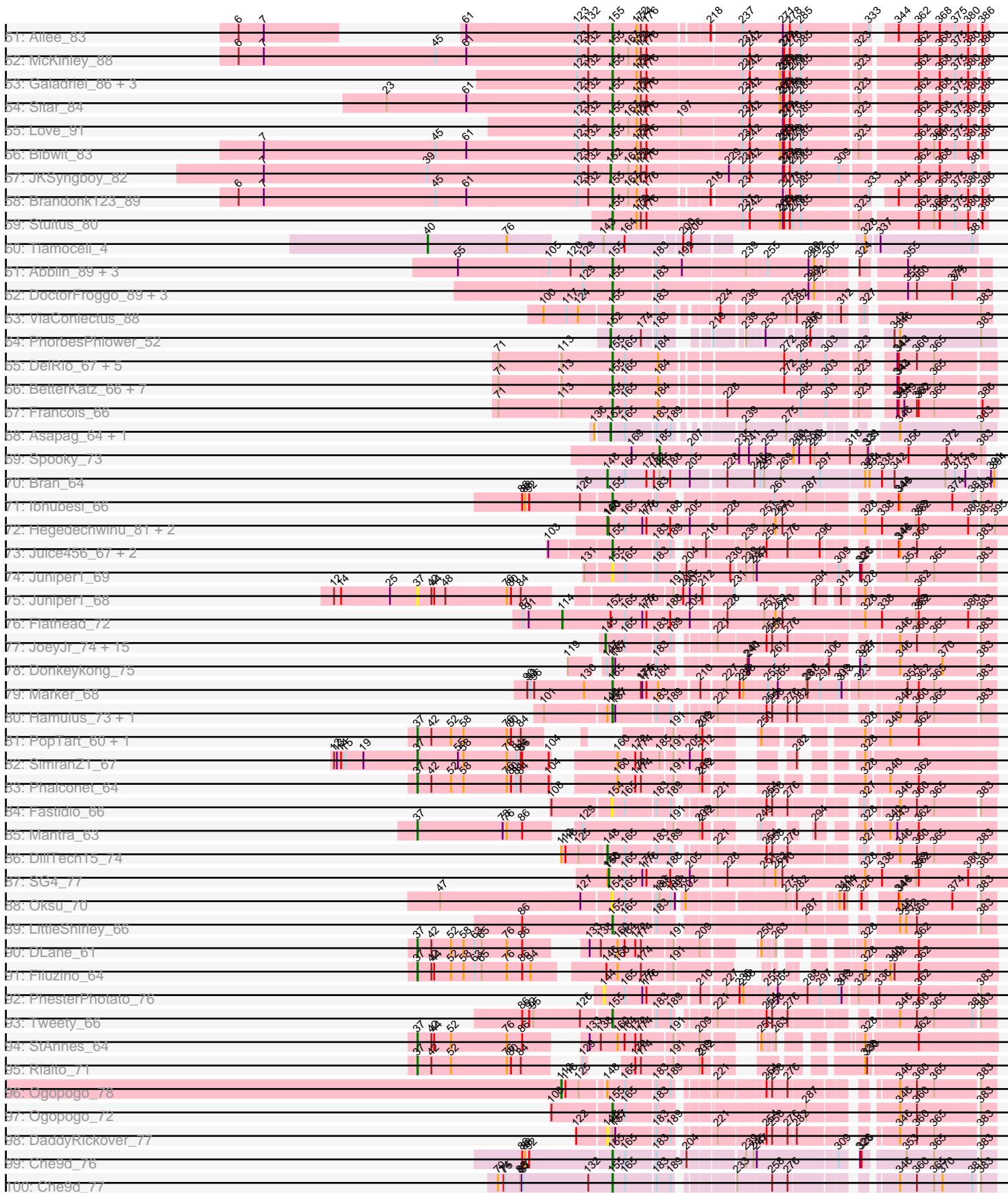


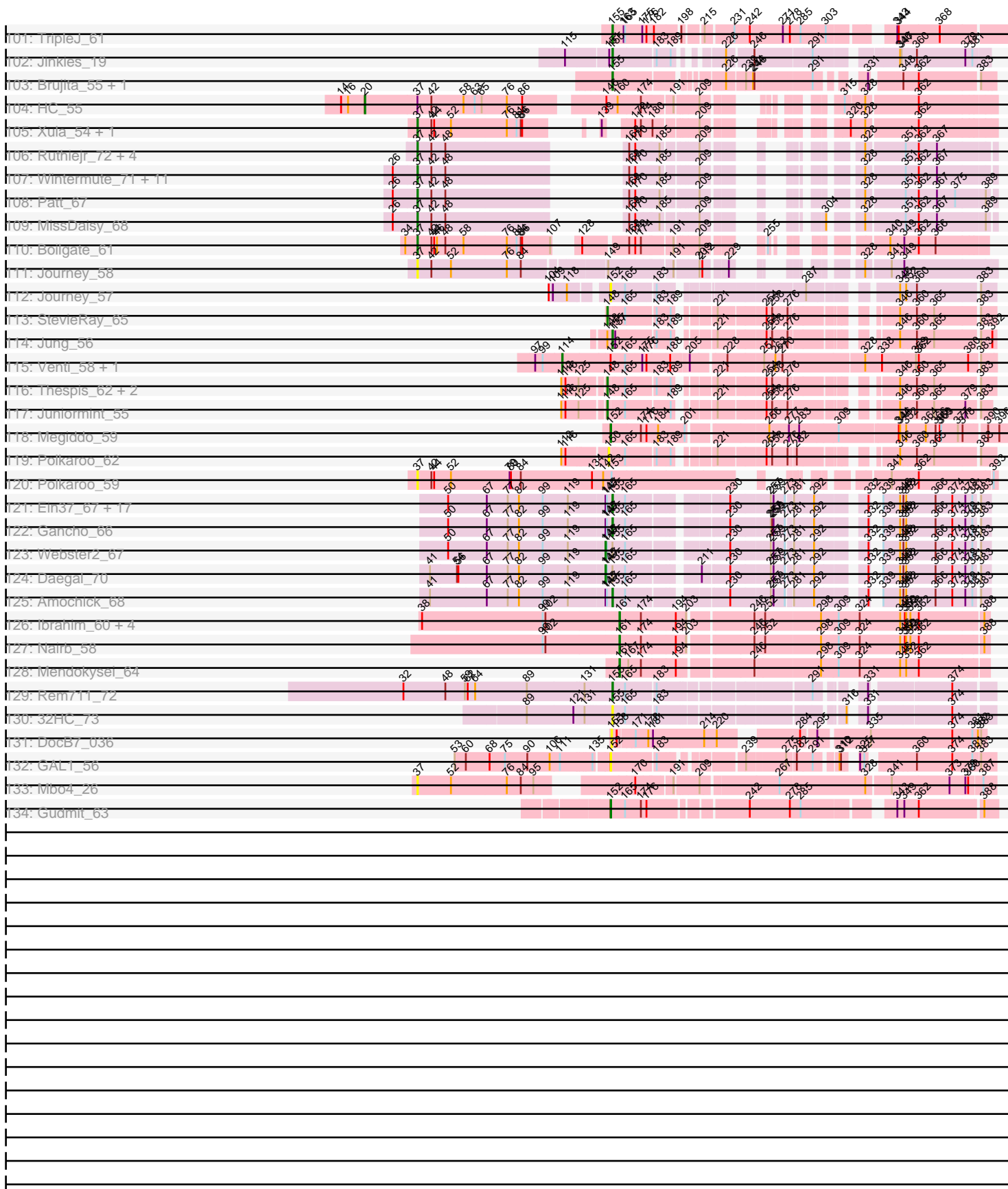
Pham 167936



Pham 167936



Pham 167936



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 167936 Report

This analysis was run 07/09/24 on database version 566.

Pham number 167936 has 302 members, 40 are drafts.

Phages represented in each track:

- Track 1 : Lamina13_71, PSullivan_67, Swole_68, JuliaChild_70, Pita2_70, Tote_65
- Track 2 : Ashballer_72
- Track 3 : Watermelon_68, Trouble_68, Wheeler_71, KSSJEB_67, GrecoEtereo_68
- Track 4 : Marchy_59, Acme_70, Payneful_64, Greg_69
- Track 5 : HarryOW_66
- Track 6 : Rhynn_57
- Track 7 : Fajezeel_69
- Track 8 : Big3_68
- Track 9 : PFR2_41, PFR1_39
- Track 10 : GTE7_37, HayZem_48, Amore2_49
- Track 11 : GMA7_38, Austin_49
- Track 12 : Sombrero_47, FelixAlejandro_51, Butterball_50
- Track 13 : Beaver_50, Msay19_51, CathyBurgh_46, Adgers_48, John316_50, RemRem_47, GourdThymes_46, Gorko_46, Poland_53, Barbochs_47, Flakey_46, Ekhein_47, Exiguo_46, Hotorobo_46, BirksAndSocks_51, Lizzo_46, Breezic_46, Monty_45, Squibbles_46, Sam12_46
- Track 14 : Diabla_50, RoyalG_47, SteveFrench_46
- Track 15 : PokyPuppy_45
- Track 16 : Chelms_46, Dakiti_47
- Track 17 : BigShaq_46, PierreThree_46, BenoitCattle_48
- Track 18 : Boneham_50
- Track 19 : Jellybones_49, Eggsie_46
- Track 20 : Linetti_47
- Track 21 : Jams_46, Charianelly_46, Shelley_46, MrWormie_46, Newt_47, Kaseim_46, Nimi13_46, Teal_46, Lidong_46, Minos_47, Bianmat_46
- Track 22 : Lahirium_46, Anamika_46, Guillaume_46, Jormungandr_46, Hail2Pitt_45, Sticker17_46
- Track 23 : Harambe_46
- Track 24 : GalacticEye_46, Luker_47, Damp_44, Berries_46, Hello_46, Neevie_46, Woes_46
- Track 25 : Teech_43, Katyusha_42, Niagara_42, Benczkowski14_42, Teatealatte_43, Kvothe_42, Tredge_43
- Track 26 : Demosthenes_42
- Track 27 : Philon9_44
- Track 28 : ASerpRocky_43
- Track 29 : Hollow_43
- Track 30 : Utz_60

- Track 31 : Frokostdame_67
- Track 32 : Walrus_66
- Track 33 : UmaThurman_67
- Track 34 : Petra_69
- Track 35 : BritBrat_76
- Track 36 : Hyzer_73
- Track 37 : Vasanti_62
- Track 38 : DobbysSock_52
- Track 39 : Sidious_64
- Track 40 : Sidious_65
- Track 41 : RogerDodger_62
- Track 42 : Fugax_62, ClamChowder_61, KimmyK_60, Barb_61, PinkCoffee_61
- Track 43 : Danyall_60, PullumCavea_58
- Track 44 : Clown_9
- Track 45 : Sedona_83, Jabberwocky_84, BobBob_87, Fitzgerald_83, Keitabear_83
- Track 46 : Fosterous_87
- Track 47 : Thing3_10, Paries_10, MoontowerMania_8, Galadriel_11, Kamashten_10, Love_11
- Track 48 : Brandonk123_11
- Track 49 : Lennon_85
- Track 50 : Sanjuju_83
- Track 51 : Ailee_83
- Track 52 : McKinley_88
- Track 53 : Galadriel_86, Thing3_86, Rofo_85, Kamashten_86
- Track 54 : Sitar_84
- Track 55 : Love_91
- Track 56 : Bibwit_83
- Track 57 : JKSyngboy_82
- Track 58 : Brandonk123_89
- Track 59 : Stultus_80
- Track 60 : Tiamoceli_4
- Track 61 : Abblin_89, Natkenzie_89, Sampson_91, Scioto_89
- Track 62 : DoctorFroggo_89, Verity_88, Zipp_89, Delrey21_89
- Track 63 : ViaConlectus_88
- Track 64 : PhorbessPhlower_52
- Track 65 : DelRio_67, Ayotoya_67, GrandSlam_68, Hamood_68, Chop_68, Pimento_70
- Track 66 : BetterKatz_66, Brylie_66, Bock_68, Nadeem_66, Parada_66, NancyRae_65, Mulch_66, WheatThin_65
- Track 67 : Francois_66
- Track 68 : Asapag_64, Getalong_67
- Track 69 : Spooky_73
- Track 70 : Bran_64
- Track 71 : Ibhubesi_66
- Track 72 : Hegedechwinu_81, JalFarm20_88, Smooch_24
- Track 73 : Juice456_67, JalFarm20_79, KristaRAM_69
- Track 74 : Juniper1_69
- Track 75 : Juniper1_68
- Track 76 : Flathead_72
- Track 77 : JoeyJr_74, Doomphist_77, KingMidas_73, Nimbo_66, PHappiness_74, Leperchaun_72, Geralt_67, Poenanya_77, Daenerys_73, Inventum_72, Scottish_72, Polka14_78, OldBen_71, RitaG_74, Sassafras_75, Empress_72
- Track 78 : Donkeykong_75

- Track 79 : Marker_68
- Track 80 : Hamulus_73, LittleShirley_73
- Track 81 : PopTart_60, SassyB_60
- Track 82 : SimranZ1_67
- Track 83 : Phalconet_64
- Track 84 : Fastidio_66
- Track 85 : Mantra_63
- Track 86 : DillTech15_74
- Track 87 : SG4_77
- Track 88 : Oksu_70
- Track 89 : LittleShirley_66
- Track 90 : DLane_61
- Track 91 : Filuzino_64
- Track 92 : PhesterPhotato_76
- Track 93 : Tweety_66
- Track 94 : StAnnes_64
- Track 95 : Rialto_71
- Track 96 : Ogopogo_78
- Track 97 : Ogopogo_72
- Track 98 : DaddyRickover_77
- Track 99 : Che9d_76
- Track 100 : Che9d_77
- Track 101 : TripleJ_61
- Track 102 : Jinkies_19
- Track 103 : Brujita_55, Island3_55
- Track 104 : HC_55
- Track 105 : Xula_54, QueenHazel_55
- Track 106 : Ruthiejr_72, Y2_68, Y10_68, JF1_71, OmniCritical_70
- Track 107 : Wintermute_71, Cheetobro_71, Eponine_73, Chancellor_71, Reptar3000_68, Taquito_70, Fionnbharth_71, Mitti_71, Juliette_73, Slarp_71, SamScheppers_69, Malthus_72
- Track 108 : Patt_67
- Track 109 : MissDaisy_68
- Track 110 : Boilgate_61
- Track 111 : Journey_58
- Track 112 : Journey_57
- Track 113 : StevieRay_65
- Track 114 : Jung_56
- Track 115 : Venti_58, Bartholomew_57
- Track 116 : Thespis_62, Brusacoram_62, Atcoo_62
- Track 117 : Juniormint_55
- Track 118 : Megiddo_59
- Track 119 : Polkaroo_62
- Track 120 : Polkaroo_59
- Track 121 : Ein37_67, HH92_66, Wishmaker_62, Kinbote_65, DeepSoil15_67, OBUpride_67, Amymech_67, Giles_62, Luke_66, Forge_62, LilHazelNut_67, Hail_62, Hadrien_66, Gravaillia_63, Ubuntu_67, Luna22_62, Dewey_62, Evanesce_66
- Track 122 : Gancho_66
- Track 123 : Webster2_67
- Track 124 : Daegal_70
- Track 125 : Amochick_68
- Track 126 : Ibrahim_60, ZenTime222_66, RonRayGun_60, Whitty_59, Bernal13_60
- Track 127 : Nairb_58

- Track 128 : Mendokysei_64
- Track 129 : Rem711_72
- Track 130 : 32HC_73
- Track 131 : DocB7_036
- Track 132 : GAL1_56
- Track 133 : Mbo4_26
- Track 134 : Gudmit_63

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 155, it was called in 76 of the 262 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 32HC_73, Abblin_89, Ailee_83, Amochick_68, Amymech_67, Ayotoya_67, BetterKatz_66, Bibwit_83, BobBob_87, Bock_68, Brandonk123_89, Brujita_55, Brylie_66, Che9d_76, Che9d_77, Chop_68, DeepSoil15_67, DelRio_67, Delrey21_89, Dewey_62, DoctorFroggo_89, Donkeykong_75, Ein37_67, Evanesce_66, Fitzgerald_83, Forge_62, Fosterous_87, Francois_66, Galadriel_86, Gancho_66, Giles_62, GrandSlam_68, Gravaillia_63, HH92_66, Hadrien_66, Hail_62, Hamood_68, Hamulus_73, Hyzer_73, Ibhubesi_66, Island3_55, Jabberwocky_84, JalFarm20_79, Jinkies_19, Juice456_67, Jung_56, Juniper1_69, Kamashten_86, Keitabear_83, Kinbote_65, KristaRAM_69, Lennon_85, LillHazelNut_67, LittleShirley_66, LittleShirley_73, Love_91, Luke_66, Luna22_62, Marker_68, McKinley_88, Mulch_66, Nadeem_66, NancyRae_65, Natkenzie_89, OBUpride_67, Ogopogo_72, PFR1_39, PFR2_41, Parada_66, Pimento_70, Rem711_72, Rofo_85, Sampson_91, Sanjuju_83, Scioto_89, Sedona_83, Sitar_84, Stultus_80, Thing3_86, TripleJ_61, Tweety_66, Ubuntu_67, Verity_88, ViaConlectus_88, WheatThin_65, Wishmaker_62, Zipp_89,

Genes that have the "Most Annotated" start but do not call it:

- DaddyRickover_77, Daegal_70, Webster2_67,

Genes that do not have the "Most Annotated" start:

- ASerpRocky_43, Acme_70, Adgers_48, Amore2_49, Anamika_46, Asapag_64, Ashballer_72, Atcoo_62, Austin_49, Barb_61, Barbochs_47, Bartholomew_57, Beaver_50, Benczkowski14_42, BenoitCattle_48, Bernal13_60, Berries_46, Bianmat_46, Big3_68, BigShaq_46, BirksAndSocks_51, Boilgate_61, Boneham_50, Bran_64, Brandonk123_11, Breezic_46, BritBrat_76, Brusacoram_62, Butterball_50, CathyBurgh_46, Chancellor_71, Charianelly_46, Cheetobro_71, Chelms_46, ClamChowder_61, Clown_9, DLane_61, Daenerys_73, Dakiti_47, Damp_44, Danyall_60, Demosthenes_42, Diabla_50, DillTech15_74, DobbysSock_52, DocB7_036, Doomphist_77, Eggsie_46, Ekhein_47, Empress_72, Eponine_73, Exiguo_46, Fajezeel_69, Fastidio_66, FelixAlejandro_51, Filuzino_64, Fionnbharth_71, Flakey_46, Flathead_72, Frokostdame_67, Fugax_62, GAL1_56, GMA7_38, GTE7_37, GalacticEye_46, Galadriel_11, Geralt_67, Getalong_67, Gorko_46, GourdThymes_46, GrecoEtereo_68, Greg_69, Gudmit_63, Guillaume_46, HC_55, Hail2Pitt_45, Harambe_46, HarryOW_66, HayZem_48, Hegedechwinu_81, Hello_46, Hollow_43, Hotorobo_46, Ibrahim_60, Inventum_72, JF1_71, JKSyngboy_82, JalFarm20_88, Jams_46, Jellybones_49, JoeyJr_74, John316_50,

Jormungandr_46, Journey_57, Journey_58, JuliaChild_70, Juliette_73, Junormint_55, Juniper1_68, KSSJEB_67, Kamashten_10, Kaseim_46, Katyusha_42, KimmyK_60, KingMidas_73, Kvothe_42, Lahirium_46, Lamina13_71, Leperchaun_72, Lidong_46, Linetti_47, Lizzo_46, Love_11, Luker_47, Malthus_72, Mantra_63, Marchy_59, Mbo4_26, Megiddo_59, Mendokysei_64, Minos_47, MissDaisy_68, Mitti_71, Monty_45, MoontowerMania_8, MrWormie_46, Msay19_51, Nairb_58, Neoevie_46, Newt_47, Niagara_42, Nimbo_66, Nimi13_46, Ogopogo_78, Oksu_70, OldBen_71, OmniCritical_70, PHappiness_74, PSullivan_67, Paries_10, Patt_67, Payneful_64, Petra_69, Phalconet_64, PhesterPotato_76, Philon9_44, PhorbesPhlower_52, PierreThree_46, PinkCoffee_61, Pita2_70, Poenanya_77, PokyPuppy_45, Poland_53, Polka14_78, Polkaro_59, Polkaro_62, PopTart_60, PullumCavea_58, QueenHazel_55, RemRem_47, Reptar3000_68, Rhynn_57, Rialto_71, RitaG_74, RogerDodger_62, RonRayGun_60, RoyalG_47, Ruthiejr_72, SG4_77, Sam12_46, SamScheppers_69, Sassafras_75, SassyB_60, Scottish_72, Shelley_46, Sidious_64, Sidious_65, SimranZ1_67, Slarp_71, Smooch_24, Sombrero_47, Spooky_73, Squibbles_46, StAnnes_64, SteveFrench_46, StevieRay_65, Sticker17_46, Swole_68, Taquito_70, Teal_46, Teatealatte_43, Teech_43, Thespis_62, Thing3_10, Tiamoceli_4, Tote_65, Tredge_43, Trouble_68, UmaThurman_67, Utz_60, Vasanti_62, Venti_58, Walrus_66, Watermelon_68, Wheeler_71, Whitty_59, Wintermute_71, Woes_46, Xula_54, Y10_68, Y2_68, ZenTime222_66,

Summary by start number:

Start 20:

- Found in 1 of 302 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 262
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HC_55 (I1),

Start 24:

- Found in 8 of 302 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 262
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Big3_68 (A1),

Start 27:

- Found in 11 of 302 (3.6%) of genes in pham
- Manual Annotations of this start: 1 of 262
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Fajezeel_69 (A1),

Start 31:

- Found in 7 of 302 (2.3%) of genes in pham
- Manual Annotations of this start: 6 of 262
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ashballer_72 (A1), JuliaChild_70 (A1), Lamina13_71 (A1), PSullivan_67 (A1), Pita2_70 (A1), Swole_68 (A1), Tote_65 (A1),

Start 34:

- Found in 13 of 302 (4.3%) of genes in pham
- Manual Annotations of this start: 5 of 262
- Called 38.5% of time when present

- Phage (with cluster) where this start called: GrecoEtereo_68 (A1), KSSJEB_67 (A1), Trouble_68 (A1), Watermelon_68 (A1), Wheeler_71 (A1),

Start 36:

- Found in 13 of 302 (4.3%) of genes in pham
- Manual Annotations of this start: 3 of 262
- Called 38.5% of time when present
- Phage (with cluster) where this start called: Acme_70 (A1), Frokostdame_67 (CV), Greg_69 (A1), Marchy_59 (A1), Payneful_64 (A1),

Start 37:

- Found in 50 of 302 (16.6%) of genes in pham
- Manual Annotations of this start: 44 of 262
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Barb_61 (DC1), Boilgate_61 (K8), Chancellor_71 (K4), Cheetobro_71 (K4), ClamChowder_61 (DC1), DLane_61 (F1), Danyall_60 (DC1), Eponine_73 (K4), Filuzino_64 (F1), Fionnbharth_71 (K4), Fugax_62 (DC1), JF1_71 (K4), Journey_58 (N), Juliette_73 (K4), Juniper1_68 (F1), KimmyK_60 (DC1), Malthus_72 (K4), Mantra_63 (F1), Mbo4_26 (singleton), MissDaisy_68 (K4), Mitti_71 (K4), OmniCritical_70 (K4), Patt_67 (K4), Petra_69 (CV), Phalconet_64 (F1), PinkCoffee_61 (DC1), Polkaroo_59 (P1), PopTart_60 (F1), PullumCavea_58 (DC1), QueenHazel_55 (I1), Reptar3000_68 (K4), Rialto_71 (F1), RogerDodger_62 (DC1), Ruthiejr_72 (K4), SamScheppers_69 (K4), SassyB_60 (F1), SimranZ1_67 (F1), Slarp_71 (K4), StAnnes_64 (F1), Taquito_70 (K4), UmaThurman_67 (CV), Utz_60 (CV), Vasanti_62 (CZ2), Walrus_66 (CV), Wintermute_71 (K4), Xula_54 (I1), Y10_68 (K4), Y2_68 (K4),

Start 40:

- Found in 1 of 302 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 262
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tiamoceli_4 (DE3),

Start 42:

- Found in 51 of 302 (16.9%) of genes in pham
- Manual Annotations of this start: 1 of 262
- Called 2.0% of time when present
- Phage (with cluster) where this start called: HarryOW_66 (A1),

Start 76:

- Found in 32 of 302 (10.6%) of genes in pham
- Manual Annotations of this start: 1 of 262
- Called 3.1% of time when present
- Phage (with cluster) where this start called: Rhynn_57 (A1),

Start 112:

- Found in 7 of 302 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 262
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Ogopogo_78 (F1),

Start 114:

- Found in 3 of 302 (1.0%) of genes in pham

- Manual Annotations of this start: 3 of 262
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bartholomew_57 (P1), Flathead_72 (F1), Venti_58 (P1),

Start 144:

- Found in 1 of 302 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PhesterPhotato_76 (F1),

Start 145:

- Found in 38 of 302 (12.6%) of genes in pham
- Manual Annotations of this start: 18 of 262
- Called 47.4% of time when present
- Phage (with cluster) where this start called: Daegal_70 (Q), Daenerys_73 (F1), Doomphist_77 (F1), Empress_72 (F1), Geralt_67 (F1), Inventum_72 (F1), JoeyJr_74 (F1), KingMidas_73 (F1), Leperchaun_72 (F1), Nimbo_66 (F1), OldBen_71 (F1), PHappiness_74 (F1), Poenanya_77 (F1), Polka14_78 (F1), RitaG_74 (F1), Sassafras_75 (F1), Scottish_72 (F1), Webster2_67 (Q),

Start 148:

- Found in 17 of 302 (5.6%) of genes in pham
- Manual Annotations of this start: 10 of 262
- Called 64.7% of time when present
- Phage (with cluster) where this start called: Atcoo_62 (P1), Bran_64 (EP), Brusacoram_62 (P1), DaddyRickover_77 (F1), DillTech15_74 (F1), Hegedechwinu_81 (F1), JalFarm20_88 (F1), Juniormint_55 (P1), Smooch_24 (O), StevieRay_65 (P1), Thespis_62 (P1),

Start 150:

- Found in 5 of 302 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 262
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Polkaroo_62 (P1), SG4_77 (F1),

Start 152:

- Found in 25 of 302 (8.3%) of genes in pham
- Manual Annotations of this start: 16 of 262
- Called 76.0% of time when present
- Phage (with cluster) where this start called: Asapag_64 (DN1), Brandonk123_11 (DE1), BritBrat_76 (CY2), DobbysSock_52 (CZ4), GAL1_56 (singleton), Galadriel_11 (DE1), Getalong_67 (DN1), Gudmit_63 (singleton), JKSyngboy_82 (DE1), Journey_57 (N), Kamashten_10 (DE1), Love_11 (DE1), Megiddo_59 (P1), MoontowerMania_8 (DE1), Paries_10 (DE1), PhorbesPhlower_52 (DH), Sidious_64 (CZ7), Sidious_65 (CZ7), Thing3_10 (DE1),

Start 153:

- Found in 2 of 302 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: DocB7_036 (singleton),

Start 154:

- Found in 2 of 302 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fastidio_66 (F1), Oksu_70 (F1),

Start 155:

- Found in 90 of 302 (29.8%) of genes in pham
- Manual Annotations of this start: 76 of 262
- Called 96.7% of time when present
- Phage (with cluster) where this start called: 32HC_73 (Z), Abblin_89 (DE4), Ailee_83 (DE1), Amochick_68 (Q), Amymech_67 (Q), Ayotoya_67 (DI), BetterKatz_66 (DI), Bibwit_83 (DE1), BobBob_87 (DE1), Bock_68 (DI), Brandonk123_89 (DE1), Brujita_55 (I1), Brylie_66 (DI), Che9d_76 (F2), Che9d_77 (F2), Chop_68 (DI), DeepSoil15_67 (Q), DelRio_67 (DI), Delrey21_89 (DE4), Dewey_62 (Q), DoctorFroggo_89 (DE4), Donkeykong_75 (F1), Ein37_67 (Q), Evanesce_66 (Q), Fitzgerald_83 (DE1), Forge_62 (Q), Fosterous_87 (DE1), Francois_66 (DI), Galadriel_86 (DE1), Gancho_66 (Q), Giles_62 (Q), GrandSlam_68 (DI), Gravaillia_63 (Q), HH92_66 (Q), Hadrien_66 (Q), Hail_62 (Q), Hamood_68 (DI), Hamulus_73 (F1), Hyzer_73 (CZ1), Ibhubesi_66 (F1), Island3_55 (I1), Jabberwocky_84 (DE1), JalFarm20_79 (F1), Jinkies_19 (FL), Juice456_67 (F1), Jung_56 (P1), Juniper1_69 (F1), Kamashten_86 (DE1), Keitabear_83 (DE1), Kinbote_65 (Q), KristaRAM_69 (F1), Lennon_85 (DE1), LilHazelnut_67 (Q), LittleShirley_66 (F1), LittleShirley_73 (F1), Love_91 (DE1), Luke_66 (Q), Luna22_62 (Q), Marker_68 (F1), McKinley_88 (DE1), Mulch_66 (DI), Nadeem_66 (DI), NancyRae_65 (DI), Natkenzie_89 (DE4), OBUpride_67 (Q), Ogopogo_72 (F1), PFR1_39 (BX), PFR2_41 (BX), Parada_66 (DI), Pimento_70 (DI), Rem711_72 (Z), Rofo_85 (DE1), Sampson_91 (DE4), Sanjuju_83 (DE1), Scioto_89 (DE4), Sedona_83 (DE1), Sitar_84 (DE1), Stultus_80 (DE1), Thing3_86 (DE1), TripleJ_61 (FJ), Tweety_66 (F1), Ubuntu_67 (Q), Verity_88 (DE4), ViaConlectus_88 (DE4), WheatThin_65 (DI), Wishmaker_62 (Q), Zipp_89 (DE4),

Start 156:

- Found in 77 of 302 (25.5%) of genes in pham
- Manual Annotations of this start: 64 of 262
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky_43 (CS4), Adgers_48 (CS2), Amore2_49 (CS1), Anamika_46 (CS3), Austin_49 (CS1), Barbochs_47 (CS2), Beaver_50 (CS2), Benczkowski14_42 (CS4), BenoitCattle_48 (CS2), Berries_46 (CS3), Bianmat_46 (CS3), BigShaq_46 (CS2), BirksAndSocks_51 (CS2), Boneham_50 (CS2), Breezic_46 (CS2), Butterball_50 (CS2), CathyBurgh_46 (CS2), Charianelly_46 (CS3), Chelms_46 (CS2), Dakiti_47 (CS2), Damp_44 (CS3), Demosthenes_42 (CS4), Diabla_50 (CS2), Eggsie_46 (CS2), Ekhein_47 (CS2), Exiguo_46 (CS2), FelixAlejandro_51 (CS2), Flakey_46 (CS2), GMA7_38 (CS1), GTE7_37 (CS1), GalacticEye_46 (CS3), Gorko_46 (CS2), GourdThymes_46 (CS2), Guillaume_46 (CS3), Hail2Pitt_45 (CS3), Harambe_46 (CS3), HayZem_48 (CS1), Hello_46 (CS3), Hollow_43 (CS4), Hotorobo_46 (CS2), Jams_46 (CS3), Jellybones_49 (CS2), John316_50 (CS2), Jormungandr_46 (CS3), Kaseim_46 (CS3), Katyusha_42 (CS4), Kvothe_42 (CS4), Lahirium_46 (CS3), Lidong_46 (CS3), Linetti_47 (CS2), Lizzo_46 (CS2), Luker_47 (CS3), Minos_47 (CS3), Monty_45 (CS2), MrWormie_46 (CS3), Msay19_51 (CS2), Neoevie_46 (CS3), Newt_47 (CS3), Niagara_42 (CS4), Nimi13_46 (CS3), Philon9_44 (CS4), PierreThree_46 (CS2), PokyPuppy_45 (CS2), Poland_53 (CS2), RemRem_47 (CS2), RoyalG_47 (CS2),

Sam12_46 (CS2), Shelley_46 (CS3), Sombrero_47 (CS2), Squibbles_46 (CS2), SteveFrench_46 (CS2), Sticker17_46 (CS3), Teal_46 (CS3), Teatealatte_43 (CS4), Teech_43 (CS4), Tredge_43 (CS4), Woes_46 (CS3),

Start 161:

- Found in 7 of 302 (2.3%) of genes in pham
- Manual Annotations of this start: 7 of 262
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bernal13_60 (T), Ibrahim_60 (T), Mendokysei_64 (T), Nairb_58 (T), RonRayGun_60 (T), Whitty_59 (T), ZenTime222_66 (T),

Start 185:

- Found in 25 of 302 (8.3%) of genes in pham
- Manual Annotations of this start: 2 of 262
- Called 8.0% of time when present
- Phage (with cluster) where this start called: Clown_9 (DC2), Spooky_73 (DN2),

Summary by clusters:

There are 36 clusters represented in this pham: singleton, DH, DI, CZ2, CZ1, CZ7, CZ4, K4, FJ, K8, BX, I1, FL, EP, A1, DN1, DN2, CS4, CS1, CS3, CS2, CY2, P1, O, N, Q, T, Z, DC2, CV, DC1, F1, F2, DE1, DE3, DE4,

Info for manual annotations of cluster A1:

- Start number 24 was manually annotated 1 time for cluster A1.
- Start number 27 was manually annotated 1 time for cluster A1.
- Start number 31 was manually annotated 6 times for cluster A1.
- Start number 34 was manually annotated 5 times for cluster A1.
- Start number 36 was manually annotated 2 times for cluster A1.
- Start number 42 was manually annotated 1 time for cluster A1.
- Start number 76 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster CS1:

- Start number 156 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS2:

- Start number 156 was manually annotated 29 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 156 was manually annotated 23 times for cluster CS3.

Info for manual annotations of cluster CS4:

- Start number 156 was manually annotated 9 times for cluster CS4.

Info for manual annotations of cluster CV:

- Start number 36 was manually annotated 1 time for cluster CV.
- Start number 37 was manually annotated 4 times for cluster CV.

Info for manual annotations of cluster CY2:

- Start number 152 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ2:

- Start number 37 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ4:

- Start number 152 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster CZ7:

- Start number 152 was manually annotated 2 times for cluster CZ7.

Info for manual annotations of cluster DC1:

- Start number 37 was manually annotated 8 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 185 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:

- Start number 152 was manually annotated 7 times for cluster DE1.
- Start number 155 was manually annotated 18 times for cluster DE1.

Info for manual annotations of cluster DE3:

- Start number 40 was manually annotated 1 time for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 155 was manually annotated 6 times for cluster DE4.

Info for manual annotations of cluster DH:

- Start number 152 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DI:

- Start number 155 was manually annotated 13 times for cluster DI.

Info for manual annotations of cluster DN1:

- Start number 152 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 185 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster EP:

- Start number 148 was manually annotated 1 time for cluster EP.

Info for manual annotations of cluster F1:

- Start number 37 was manually annotated 9 times for cluster F1.
- Start number 112 was manually annotated 1 time for cluster F1.
- Start number 114 was manually annotated 1 time for cluster F1.
- Start number 145 was manually annotated 16 times for cluster F1.
- Start number 148 was manually annotated 3 times for cluster F1.
- Start number 150 was manually annotated 1 time for cluster F1.
- Start number 155 was manually annotated 11 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 155 was manually annotated 2 times for cluster F2.

Info for manual annotations of cluster FJ:

- Start number 155 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FL:

- Start number 155 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster I1:

- Start number 20 was manually annotated 1 time for cluster I1.
- Start number 37 was manually annotated 2 times for cluster I1.
- Start number 155 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster K4:

- Start number 37 was manually annotated 19 times for cluster K4.

Info for manual annotations of cluster K8:

- Start number 37 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster O:

- Start number 148 was manually annotated 1 time for cluster O.

Info for manual annotations of cluster P1:

- Start number 114 was manually annotated 2 times for cluster P1.
- Start number 148 was manually annotated 5 times for cluster P1.
- Start number 152 was manually annotated 1 time for cluster P1.
- Start number 155 was manually annotated 1 time for cluster P1.

Info for manual annotations of cluster Q:

- Start number 145 was manually annotated 2 times for cluster Q.
- Start number 155 was manually annotated 20 times for cluster Q.

Info for manual annotations of cluster T:

- Start number 161 was manually annotated 7 times for cluster T.

Info for manual annotations of cluster Z:

- Start number 155 was manually annotated 1 time for cluster Z.

Gene Information:

Gene: 32HC_73 Start: 44576, Stop: 45244, Start Num: 155

Candidate Starts for 32HC_73:

(89, 44408), (121, 44507), (131, 44528), (Start: 155 @44576 has 76 MA's), (165, 44603), (183, 44657), (316, 44987), (331, 45008), (374, 45161),

Gene: ASerpRocky_43 Start: 45618, Stop: 44902, Start Num: 156

Candidate Starts for ASerpRocky_43:

(Start: 156 @45618 has 64 MA's), (162, 45603), (191, 45501), (220, 45411), (223, 45405), (295, 45252), (322, 45189), (329, 45159), (363, 45048), (381, 44937),

Gene: Abblin_89 Start: 59142, Stop: 59831, Start Num: 155

Candidate Starts for Abblin_89:

(55, 58827), (105, 59016), (120, 59061), (129, 59085), (Start: 155 @59142 has 76 MA's), (183, 59223), (199, 59274), (239, 59400), (255, 59439), (289, 59517), (292, 59529), (305, 59550), (324, 59586), (355, 59667),

Gene: Acme_70 Start: 44165, Stop: 43323, Start Num: 36

Candidate Starts for Acme_70:

(Start: 27 @44201 has 1 MA's), (Start: 34 @44186 has 5 MA's), (Start: 36 @44165 has 3 MA's), (Start: 42 @44135 has 1 MA's), (43, 44132), (49, 44102), (52, 44093), (78, 43973), (170, 43865), (191, 43796), (222, 43721), (340, 43535), (349, 43505), (384, 43346),

Gene: Adgers_48 Start: 44794, Stop: 44072, Start Num: 156

Candidate Starts for Adgers_48:

(Start: 156 @44794 has 64 MA's), (171, 44755), (178, 44728), (191, 44677), (217, 44602), (220, 44587), (264, 44503), (295, 44428), (343, 44272), (363, 44224), (365, 44194), (385, 44092),

Gene: Ailee_83 Start: 57588, Stop: 58286, Start Num: 155

Candidate Starts for Ailee_83:

(6, 57051), (7, 57105), (61, 57276), (123, 57513), (132, 57537), (Start: 155 @57588 has 76 MA's), (172, 57636), (174, 57645), (176, 57657), (218, 57765), (237, 57825), (271, 57906), (278, 57921), (285, 57942), (333, 58074), (344, 58107), (362, 58149), (368, 58194), (375, 58227), (380, 58254), (386, 58275),

Gene: Amochick_68 Start: 45397, Stop: 46059, Start Num: 155

Candidate Starts for Amochick_68:

(41, 45019), (67, 45136), (77, 45181), (82, 45205), (99, 45256), (119, 45310), (Start: 145 @45385 has 18 MA's), (147, 45388), (Start: 155 @45397 has 76 MA's), (165, 45424), (230, 45598), (257, 45676), (259, 45682), (273, 45706), (281, 45715), (292, 45757), (332, 45841), (339, 45844), (346, 45877), (348, 45883), (352, 45889), (366, 45952), (374, 45988), (379, 46015), (381, 46030), (383, 46039),

Gene: Amore2_49 Start: 45293, Stop: 44574, Start Num: 156

Candidate Starts for Amore2_49:

(Start: 156 @45293 has 64 MA's), (171, 45254), (178, 45227), (186, 45194), (191, 45176), (217, 45101), (220, 45086), (225, 45077), (264, 45002), (295, 44927),

Gene: Amymech_67 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for Amymech_67:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: Anamika_46 Start: 46699, Stop: 45980, Start Num: 156

Candidate Starts for Anamika_46:

(Start: 156 @46699 has 64 MA's), (178, 46633), (191, 46582), (195, 46576), (220, 46492), (248, 46447), (264, 46408), (295, 46333), (299, 46324), (363, 46129),

Gene: Asapag_64 Start: 39261, Stop: 39899, Start Num: 152

Candidate Starts for Asapag_64:

(136, 39240), (Start: 152 @39261 has 16 MA's), (165, 39291), (183, 39345), (189, 39372), (239, 39474), (275, 39552), (346, 39705), (383, 39870),

Gene: Ashballer_72 Start: 44821, Stop: 43955, Start Num: 31

Candidate Starts for Ashballer_72:

(Start: 24 @44848 has 1 MA's), (29, 44827), (Start: 31 @44821 has 6 MA's), (Start: 36 @44794 has 3 MA's), (Start: 42 @44764 has 1 MA's), (43, 44761), (49, 44731), (52, 44722), (78, 44602), (170, 44494), (191, 44425), (222, 44350), (340, 44164), (349, 44134), (384, 43975),

Gene: Atcoo_62 Start: 41875, Stop: 42537, Start Num: 148

Candidate Starts for Atcoo_62:

(Start: 112 @41794 has 1 MA's), (116, 41803), (125, 41830), (Start: 148 @41875 has 10 MA's), (165, 41908), (183, 41962), (189, 41989), (221, 42049), (254, 42139), (258, 42151), (276, 42184), (346, 42349), (360, 42382), (365, 42418), (383, 42508),

Gene: Austin_49 Start: 45293, Stop: 44574, Start Num: 156

Candidate Starts for Austin_49:

(Start: 156 @45293 has 64 MA's), (178, 45227), (186, 45194), (191, 45176), (217, 45101), (220, 45086), (225, 45077), (264, 45002), (295, 44927),

Gene: Ayotoya_67 Start: 43566, Stop: 44279, Start Num: 155

Candidate Starts for Ayotoya_67:

(71, 43332), (113, 43461), (Start: 155 @43566 has 76 MA's), (165, 43593), (184, 43659), (272, 43884), (285, 43917), (303, 43971), (323, 44028), (343, 44079), (344, 44082), (360, 44121), (365, 44157),

Gene: Barb_61 Start: 44265, Stop: 45221, Start Num: 37

Candidate Starts for Barb_61:

(Start: 37 @44265 has 44 MA's), (58, 44361), (Start: 76 @44451 has 1 MA's), (184, 44721), (191, 44745), (209, 44790), (212, 44796), (266, 44895), (341, 45006), (360, 45060),

Gene: Barbochs_47 Start: 44538, Stop: 43816, Start Num: 156

Candidate Starts for Barbochs_47:

(Start: 156 @44538 has 64 MA's), (171, 44499), (178, 44472), (191, 44421), (217, 44346), (220, 44331), (264, 44247), (295, 44172), (343, 44016), (363, 43968), (365, 43938), (385, 43836),

Gene: Bartholomew_57 Start: 37622, Stop: 38488, Start Num: 114

Candidate Starts for Bartholomew_57:

(97, 37571), (99, 37586), (Start: 114 @37622 has 3 MA's), (Start: 152 @37721 has 16 MA's), (165, 37751), (175, 37784), (176, 37793), (188, 37841), (205, 37874), (228, 37943), (251, 38015), (262, 38039), (270, 38054), (328, 38225), (338, 38261), (359, 38327), (362, 38333), (380, 38438), (383, 38456),

Gene: Beaver_50 Start: 46308, Stop: 45586, Start Num: 156

Candidate Starts for Beaver_50:

(Start: 156 @46308 has 64 MA's), (171, 46269), (178, 46242), (191, 46191), (217, 46116), (220, 46101), (264, 46017), (295, 45942), (343, 45786), (363, 45738), (365, 45708), (385, 45606),

Gene: Benczkowski14_42 Start: 45651, Stop: 44935, Start Num: 156

Candidate Starts for Benczkowski14_42:

(Start: 156 @45651 has 64 MA's), (162, 45636), (191, 45534), (220, 45444), (223, 45438), (295, 45285), (322, 45222), (329, 45192), (381, 44970),

Gene: BenoitCattle_48 Start: 44738, Stop: 44016, Start Num: 156

Candidate Starts for BenoitCattle_48:

(Start: 156 @44738 has 64 MA's), (171, 44699), (178, 44672), (191, 44621), (217, 44546), (220, 44531), (264, 44447), (295, 44372), (343, 44216), (363, 44168), (365, 44138), (385, 44036),

Gene: Bernal13_60 Start: 41221, Stop: 41958, Start Num: 161

Candidate Starts for Bernal13_60:

(38, 40804), (99, 41062), (102, 41068), (Start: 161 @41221 has 7 MA's), (174, 41263), (194, 41335), (203, 41353), (246, 41479), (252, 41497), (298, 41611), (309, 41647), (324, 41692), (346, 41776), (350, 41785), (352, 41788), (358, 41797), (362, 41815), (388, 41947),

Gene: Berries_46 Start: 46670, Stop: 45951, Start Num: 156

Candidate Starts for Berries_46:

(Start: 156 @46670 has 64 MA's), (178, 46604), (191, 46553), (195, 46547), (220, 46463), (248, 46418), (264, 46379), (295, 46304), (363, 46100),

Gene: BetterKatz_66 Start: 42765, Stop: 43475, Start Num: 155

Candidate Starts for BetterKatz_66:

(71, 42531), (113, 42660), (Start: 155 @42765 has 76 MA's), (165, 42792), (184, 42858), (272, 43083), (285, 43116), (303, 43170), (323, 43227), (343, 43278), (344, 43281), (365, 43356),

Gene: Bianmat_46 Start: 46710, Stop: 45991, Start Num: 156

Candidate Starts for Bianmat_46:

(Start: 156 @46710 has 64 MA's), (178, 46644), (187, 46602), (191, 46593), (195, 46587), (220, 46503), (248, 46458), (260, 46425), (264, 46419), (295, 46344), (363, 46140),

Gene: Bibwit_83 Start: 56952, Stop: 57692, Start Num: 155

Candidate Starts for Bibwit_83:

(7, 56205), (45, 56574), (61, 56640), (123, 56877), (132, 56901), (Start: 155 @56952 has 76 MA's), (172, 57000), (174, 57009), (176, 57021), (237, 57213), (242, 57228), (268, 57288), (271, 57294), (272, 57297), (278, 57309), (279, 57315), (285, 57330), (323, 57441), (362, 57555), (365, 57588), (368, 57600), (375, 57633), (380, 57660), (386, 57681),

Gene: Big3_68 Start: 44998, Stop: 44108, Start Num: 24

Candidate Starts for Big3_68:

(9, 45160), (11, 45127), (21, 45037), (Start: 24 @44998 has 1 MA's), (33, 44968), (Start: 34 @44965 has 5 MA's), (43, 44911), (51, 44878), (57, 44857), (80, 44752), (84, 44731), (94, 44710), (95, 44704), (140, 44629), (159, 44599), (200, 44482), (209, 44449), (328, 44368), (343, 44302), (364, 44242), (374, 44185), (375, 44179), (379, 44158),

Gene: BigShaq_46 Start: 44743, Stop: 44021, Start Num: 156

Candidate Starts for BigShaq_46:

(Start: 156 @44743 has 64 MA's), (171, 44704), (178, 44677), (191, 44626), (217, 44551), (220, 44536), (264, 44452), (295, 44377), (343, 44221), (363, 44173), (365, 44143), (385, 44041),

Gene: BirksAndSocks_51 Start: 46658, Stop: 45936, Start Num: 156

Candidate Starts for BirksAndSocks_51:

(Start: 156 @46658 has 64 MA's), (171, 46619), (178, 46592), (191, 46541), (217, 46466), (220, 46451), (264, 46367), (295, 46292), (343, 46136), (363, 46088), (365, 46058), (385, 45956),

Gene: BobBob_87 Start: 57791, Stop: 58489, Start Num: 155

Candidate Starts for BobBob_87:

(7, 57044), (45, 57413), (61, 57479), (123, 57716), (132, 57740), (Start: 155 @57791 has 76 MA's), (172, 57839), (174, 57848), (176, 57860), (218, 57968), (237, 58028), (271, 58109), (278, 58124), (285, 58145), (333, 58277), (344, 58310), (362, 58352), (368, 58397), (375, 58430), (380, 58457), (386, 58478),

Gene: Bock_68 Start: 43009, Stop: 43719, Start Num: 155

Candidate Starts for Bock_68:

(71, 42775), (113, 42904), (Start: 155 @43009 has 76 MA's), (165, 43036), (184, 43102), (272, 43327), (285, 43360), (303, 43414), (323, 43471), (343, 43522), (344, 43525), (365, 43600),

Gene: Boilgate_61 Start: 43556, Stop: 44494, Start Num: 37

Candidate Starts for Boilgate_61:

(Start: 34 @43532 has 5 MA's), (Start: 37 @43556 has 44 MA's), (Start: 42 @43583 has 1 MA's), (44, 43589), (46, 43595), (48, 43613), (58, 43652), (Start: 76 @43742 has 1 MA's), (81, 43763), (84, 43772), (86, 43775), (107, 43835), (128, 43853), (168, 43940), (170, 43952), (174, 43964), (191, 44021), (209, 44066), (255, 44141), (340, 44291), (349, 44321), (362, 44351), (366, 44387),

Gene: Boneham_50 Start: 46562, Stop: 45840, Start Num: 156

Candidate Starts for Boneham_50:

(Start: 156 @46562 has 64 MA's), (171, 46523), (178, 46496), (191, 46445), (217, 46370), (220, 46355), (264, 46271), (295, 46196), (362, 45995), (363, 45992), (385, 45860),

Gene: Bran_64 Start: 40159, Stop: 40923, Start Num: 148

Candidate Starts for Bran_64:

(Start: 148 @40159 has 10 MA's), (165, 40192), (176, 40234), (182, 40249), (Start: 185 @40261 has 2 MA's), (188, 40282), (205, 40315), (228, 40384), (246, 40441), (249, 40450), (251, 40456), (269, 40492), (297, 40573), (328, 40663), (334, 40672), (338, 40699), (342, 40726), (371, 40828), (375, 40849), (379, 40870), (391, 40915), (394, 40918),

Gene: Brandonk123_11 Start: 5315, Stop: 5971, Start Num: 152

Candidate Starts for Brandonk123_11:

(Start: 152 @5315 has 16 MA's), (177, 5387), (183, 5399), (189, 5426), (239, 5552), (275, 5627), (291, 5675), (325, 5732), (326, 5735), (342, 5780), (346, 5789),

Gene: Brandonk123_89 Start: 57956, Stop: 58654, Start Num: 155

Candidate Starts for Brandonk123_89:

(6, 57155), (7, 57209), (45, 57578), (61, 57644), (123, 57881), (132, 57905), (Start: 155 @57956 has 76 MA's), (167, 57989), (172, 58004), (176, 58025), (218, 58133), (237, 58193), (271, 58274), (278, 58289), (285, 58310), (333, 58442), (344, 58475), (362, 58517), (368, 58562), (375, 58595), (380, 58622), (386, 58643),

Gene: Breezic_46 Start: 44551, Stop: 43829, Start Num: 156

Candidate Starts for Breezic_46:

(Start: 156 @44551 has 64 MA's), (171, 44512), (178, 44485), (191, 44434), (217, 44359), (220, 44344), (264, 44260), (295, 44185), (343, 44029), (363, 43981), (365, 43951), (385, 43849),

Gene: BritBrat_76 Start: 47469, Stop: 48248, Start Num: 152

Candidate Starts for BritBrat_76:

(Start: 152 @47469 has 16 MA's), (167, 47505), (179, 47550), (Start: 185 @47562 has 2 MA's), (190, 47589), (228, 47703), (274, 47826), (295, 47892), (309, 47937), (311, 47940), (362, 48093), (386, 48222), (391, 48240),

Gene: Brujita_55 Start: 37346, Stop: 37996, Start Num: 155

Candidate Starts for Brujita_55:

(Start: 155 @37346 has 76 MA's), (226, 37532), (239, 37568), (244, 37583), (246, 37586), (291, 37694), (331, 37760), (348, 37814), (362, 37844), (383, 37967),

Gene: Brusacoram_62 Start: 40418, Stop: 41080, Start Num: 148

Candidate Starts for Brusacoram_62:

(Start: 112 @40337 has 1 MA's), (116, 40346), (125, 40373), (Start: 148 @40418 has 10 MA's), (165, 40451), (183, 40505), (189, 40532), (221, 40592), (254, 40682), (258, 40694), (276, 40727), (346, 40892), (360, 40925), (365, 40961), (383, 41051),

Gene: Brylie_66 Start: 42588, Stop: 43298, Start Num: 155

Candidate Starts for Brylie_66:

(71, 42354), (113, 42483), (Start: 155 @42588 has 76 MA's), (165, 42615), (184, 42681), (272, 42906), (285, 42939), (303, 42993), (323, 43050), (343, 43101), (344, 43104), (365, 43179),

Gene: Butterball_50 Start: 46562, Stop: 45840, Start Num: 156

Candidate Starts for Butterball_50:

(Start: 156 @46562 has 64 MA's), (171, 46523), (178, 46496), (186, 46463), (191, 46445), (217, 46370), (220, 46355), (264, 46271), (295, 46196), (362, 45995), (363, 45992), (385, 45860),

Gene: CathyBurgh_46 Start: 45128, Stop: 44406, Start Num: 156

Candidate Starts for CathyBurgh_46:

(Start: 156 @45128 has 64 MA's), (171, 45089), (178, 45062), (191, 45011), (217, 44936), (220, 44921), (264, 44837), (295, 44762), (343, 44606), (363, 44558), (365, 44528), (385, 44426),

Gene: Chancellor_71 Start: 43637, Stop: 44482, Start Num: 37

Candidate Starts for Chancellor_71:

(26, 43586), (Start: 37 @43637 has 44 MA's), (Start: 42 @43664 has 1 MA's), (48, 43694), (168, 43922), (170, 43934), (Start: 185 @43982 has 2 MA's), (209, 44048), (328, 44222), (351, 44300), (362, 44327), (367, 44366),

Gene: Charianelly_46 Start: 46420, Stop: 45701, Start Num: 156

Candidate Starts for Charianelly_46:

(Start: 156 @46420 has 64 MA's), (178, 46354), (187, 46312), (191, 46303), (195, 46297), (220, 46213), (248, 46168), (260, 46135), (264, 46129), (295, 46054), (363, 45850),

Gene: Che9d_76 Start: 43217, Stop: 43891, Start Num: 155

Candidate Starts for Che9d_76:

(86, 43040), (88, 43046), (92, 43055), (Start: 155 @43217 has 76 MA's), (165, 43244), (183, 43298), (204, 43346), (239, 43448), (245, 43463), (247, 43466), (309, 43619), (325, 43640), (326, 43643), (353, 43718), (365, 43772), (383, 43862),

Gene: Che9d_77 Start: 43923, Stop: 44576, Start Num: 155

Candidate Starts for Che9d_77:

(70, 43686), (74, 43698), (75, 43701), (83, 43734), (85, 43737), (87, 43740), (132, 43875), (Start: 155 @43923 has 76 MA's), (165, 43950), (183, 44004), (189, 44031), (233, 44124), (258, 44190), (276, 44223), (346, 44388), (360, 44421), (365, 44457), (370, 44475), (381, 44538), (383, 44547),

Gene: Cheetobro_71 Start: 43634, Stop: 44479, Start Num: 37

Candidate Starts for Cheetobro_71:

(26, 43583), (Start: 37 @43634 has 44 MA's), (Start: 42 @43661 has 1 MA's), (48, 43691), (168, 43919), (170, 43931), (Start: 185 @43979 has 2 MA's), (209, 44045), (328, 44219), (351, 44297), (362, 44324), (367, 44363),

Gene: Chelms_46 Start: 44743, Stop: 44021, Start Num: 156

Candidate Starts for Chelms_46:

(Start: 156 @44743 has 64 MA's), (178, 44677), (191, 44626), (217, 44551), (220, 44536), (264, 44452), (295, 44377), (343, 44221), (363, 44173), (365, 44143), (385, 44041),

Gene: Chop_68 Start: 43754, Stop: 44467, Start Num: 155

Candidate Starts for Chop_68:

(71, 43520), (113, 43649), (Start: 155 @43754 has 76 MA's), (165, 43781), (184, 43847), (272, 44072), (285, 44105), (303, 44159), (323, 44216), (343, 44267), (344, 44270), (360, 44309), (365, 44345),

Gene: ClamChowder_61 Start: 44265, Stop: 45221, Start Num: 37

Candidate Starts for ClamChowder_61:

(Start: 37 @44265 has 44 MA's), (58, 44361), (Start: 76 @44451 has 1 MA's), (184, 44721), (191, 44745), (209, 44790), (212, 44796), (266, 44895), (341, 45006), (360, 45060),

Gene: Clown_9 Start: 5559, Stop: 6242, Start Num: 185

Candidate Starts for Clown_9:

(169, 5499), (Start: 185 @5559 has 2 MA's), (207, 5628), (235, 5730), (241, 5751), (253, 5787), (280, 5847), (283, 5859), (290, 5883), (293, 5892), (318, 5964), (329, 6000), (331, 6003), (356, 6081), (372, 6162), (383, 6234),

Gene: DLane_61 Start: 40914, Stop: 41870, Start Num: 37

Candidate Starts for DLane_61:

(Start: 37 @40914 has 44 MA's), (Start: 42 @40941 has 1 MA's), (52, 40983), (58, 41010), (63, 41034), (65, 41049), (Start: 76 @41100 has 1 MA's), (86, 41133), (133, 41211), (138, 41235), (160, 41271), (164, 41286), (170, 41307), (174, 41319), (191, 41376), (209, 41421), (250, 41484), (263, 41505), (328, 41607), (362, 41712),

Gene: DaddyRickover_77 Start: 47697, Stop: 48362, Start Num: 148

Candidate Starts for DaddyRickover_77:

(122, 47643), (Start: 148 @47697 has 10 MA's), (Start: 155 @47706 has 76 MA's), (157, 47712), (183, 47787), (189, 47814), (221, 47874), (254, 47964), (258, 47976), (276, 48009), (282, 48024), (346, 48174), (360, 48207), (365, 48243), (383, 48333),

Gene: Daegal_70 Start: 45947, Stop: 46621, Start Num: 145

Candidate Starts for Daegal_70:

(41, 45581), (54, 45638), (56, 45641), (67, 45698), (77, 45743), (82, 45767), (99, 45818), (119, 45872), (Start: 145 @45947 has 18 MA's), (147, 45950), (Start: 155 @45959 has 76 MA's), (165, 45986), (211, 46106), (230, 46160), (257, 46238), (259, 46244), (273, 46268), (281, 46277), (292, 46319), (332, 46403), (339, 46406), (346, 46439), (348, 46445), (352, 46451), (366, 46514), (374, 46550), (379, 46577), (381, 46592), (383, 46601),

Gene: Daenerys_73 Start: 47291, Stop: 47959, Start Num: 145

Candidate Starts for Daenerys_73:

(Start: 145 @47291 has 18 MA's), (165, 47330), (183, 47384), (189, 47411), (221, 47471), (254, 47561), (258, 47573), (276, 47606), (346, 47771), (360, 47804), (365, 47840), (383, 47930),

Gene: Dakiti_47 Start: 45611, Stop: 44889, Start Num: 156

Candidate Starts for Dakiti_47:

(Start: 156 @45611 has 64 MA's), (178, 45545), (191, 45494), (217, 45419), (220, 45404), (264, 45320), (295, 45245), (343, 45089), (363, 45041), (365, 45011), (385, 44909),

Gene: Damp_44 Start: 45584, Stop: 44865, Start Num: 156

Candidate Starts for Damp_44:

(Start: 156 @45584 has 64 MA's), (178, 45518), (191, 45467), (195, 45461), (220, 45377), (248, 45332), (264, 45293), (295, 45218), (363, 45014),

Gene: Danyall_60 Start: 44369, Stop: 45325, Start Num: 37

Candidate Starts for Danyall_60:

(17, 44243), (23, 44309), (Start: 37 @44369 has 44 MA's), (58, 44465), (Start: 76 @44555 has 1 MA's), (184, 44825), (191, 44849), (209, 44894), (212, 44900), (266, 44999), (341, 45110), (360, 45164),

Gene: DeepSoil15_67 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for DeepSoil15_67:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: DelRio_67 Start: 43775, Stop: 44485, Start Num: 155

Candidate Starts for DelRio_67:

(71, 43541), (113, 43670), (Start: 155 @43775 has 76 MA's), (165, 43802), (184, 43868), (272, 44093), (285, 44126), (303, 44180), (323, 44237), (343, 44288), (344, 44291), (360, 44330), (365, 44366),

Gene: Delrey21_89 Start: 60618, Stop: 61307, Start Num: 155

Candidate Starts for Delrey21_89:

(129, 60561), (Start: 155 @60618 has 76 MA's), (183, 60699), (289, 60993), (292, 61005), (355, 61143), (360, 61161), (374, 61236), (375, 61242),

Gene: Demosthenes_42 Start: 45591, Stop: 44875, Start Num: 156

Candidate Starts for Demosthenes_42:

(Start: 156 @45591 has 64 MA's), (162, 45576), (191, 45474), (220, 45384), (223, 45378), (295, 45225), (322, 45162), (329, 45132), (381, 44910),

Gene: Dewey_62 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for Dewey_62:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: Diabla_50 Start: 46492, Stop: 45770, Start Num: 156

Candidate Starts for Diabla_50:

(Start: 156 @46492 has 64 MA's), (171, 46453), (191, 46375), (217, 46300), (220, 46285), (264, 46201), (295, 46126), (363, 45922), (365, 45892), (385, 45790),

Gene: DillTech15_74 Start: 44613, Stop: 45275, Start Num: 148

Candidate Starts for DillTech15_74:

(Start: 112 @44532 has 1 MA's), (116, 44541), (125, 44568), (Start: 148 @44613 has 10 MA's), (165, 44646), (183, 44700), (189, 44727), (221, 44787), (254, 44877), (258, 44889), (276, 44922), (327, 45039), (346, 45087), (360, 45120), (365, 45156), (383, 45246),

Gene: DobbysSock_52 Start: 38487, Stop: 39110, Start Num: 152

Candidate Starts for DobbysSock_52:

(137, 38466), (Start: 152 @38487 has 16 MA's), (165, 38517), (183, 38571), (219, 38640), (239, 38688), (253, 38721), (287, 38790), (290, 38799), (342, 38904), (346, 38913), (383, 39078),

Gene: DocB7_036 Start: 37520, Stop: 36810, Start Num: 153

Candidate Starts for DocB7_036:

(153, 37520), (158, 37511), (171, 37478), (178, 37451), (181, 37442), (214, 37337), (220, 37310), (284, 37184), (295, 37154), (335, 37052), (374, 36881), (381, 36839), (382, 36827), (383, 36821),

Gene: DoctorFroggo_89 Start: 60618, Stop: 61307, Start Num: 155

Candidate Starts for DoctorFroggo_89:

(129, 60561), (Start: 155 @60618 has 76 MA's), (183, 60699), (289, 60993), (292, 61005), (355, 61143), (360, 61161), (374, 61236), (375, 61242),

Gene: Donkeykong_75 Start: 46725, Stop: 47396, Start Num: 155

Candidate Starts for Donkeykong_75:

(119, 46662), (147, 46716), (Start: 155 @46725 has 76 MA's), (157, 46731), (183, 46806), (240, 46956), (241, 46959), (261, 47007), (306, 47109), (325, 47145), (327, 47154), (346, 47208), (370, 47295), (383, 47367),

Gene: Doomphist_77 Start: 47104, Stop: 47772, Start Num: 145

Candidate Starts for Doomphist_77:

(Start: 145 @47104 has 18 MA's), (165, 47143), (183, 47197), (189, 47224), (221, 47284), (254, 47374), (258, 47386), (276, 47419), (346, 47584), (360, 47617), (365, 47653), (383, 47743),

Gene: Eggsie_46 Start: 44453, Stop: 43731, Start Num: 156

Candidate Starts for Eggsie_46:

(Start: 156 @44453 has 64 MA's), (171, 44414), (178, 44387), (186, 44354), (191, 44336), (217, 44261), (220, 44246), (264, 44162), (295, 44087), (343, 43931), (363, 43883), (365, 43853), (385, 43751),

Gene: Ein37_67 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for Ein37_67:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: Ekhein_47 Start: 44256, Stop: 43534, Start Num: 156

Candidate Starts for Ekhein_47:

(Start: 156 @44256 has 64 MA's), (171, 44217), (178, 44190), (191, 44139), (217, 44064), (220, 44049), (264, 43965), (295, 43890), (343, 43734), (363, 43686), (365, 43656), (385, 43554),

Gene: Empress_72 Start: 45915, Stop: 46583, Start Num: 145

Candidate Starts for Empress_72:

(Start: 145 @45915 has 18 MA's), (165, 45954), (183, 46008), (189, 46035), (221, 46095), (254, 46185), (258, 46197), (276, 46230), (346, 46395), (360, 46428), (365, 46464), (383, 46554),

Gene: Eponine_73 Start: 44480, Stop: 45325, Start Num: 37

Candidate Starts for Eponine_73:

(26, 44429), (Start: 37 @44480 has 44 MA's), (Start: 42 @44507 has 1 MA's), (48, 44537), (168, 44765), (170, 44777), (Start: 185 @44825 has 2 MA's), (209, 44891), (328, 45065), (351, 45143), (362, 45170), (367, 45209),

Gene: Evanesce_66 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for Evanesce_66:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195),

(259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: Exiguo_46 Start: 44268, Stop: 43546, Start Num: 156

Candidate Starts for Exiguo_46:

(Start: 156 @44268 has 64 MA's), (171, 44229), (178, 44202), (191, 44151), (217, 44076), (220, 44061), (264, 43977), (295, 43902), (343, 43746), (363, 43698), (365, 43668), (385, 43566),

Gene: Fajezeel_69 Start: 43491, Stop: 42613, Start Num: 27

Candidate Starts for Fajezeel_69:

(Start: 27 @43491 has 1 MA's), (Start: 34 @43476 has 5 MA's), (Start: 36 @43455 has 3 MA's), (Start: 42 @43425 has 1 MA's), (43, 43422), (49, 43392), (52, 43383), (78, 43263), (170, 43155), (191, 43086), (222, 43011), (340, 42825), (349, 42795), (384, 42636),

Gene: Fastidio_66 Start: 41425, Stop: 42081, Start Num: 154

Candidate Starts for Fastidio_66:

(108, 41311), (154, 41425), (165, 41452), (183, 41506), (189, 41533), (221, 41593), (254, 41683), (258, 41695), (276, 41728), (327, 41845), (346, 41893), (360, 41926), (365, 41962), (383, 42052),

Gene: FelixAlejandro_51 Start: 46760, Stop: 46038, Start Num: 156

Candidate Starts for FelixAlejandro_51:

(Start: 156 @46760 has 64 MA's), (171, 46721), (178, 46694), (186, 46661), (191, 46643), (217, 46568), (220, 46553), (264, 46469), (295, 46394), (362, 46193), (363, 46190), (385, 46058),

Gene: Filuzino_64 Start: 41219, Stop: 42205, Start Num: 37

Candidate Starts for Filuzino_64:

(Start: 37 @41219 has 44 MA's), (Start: 42 @41246 has 1 MA's), (44, 41252), (52, 41288), (58, 41315), (63, 41339), (65, 41354), (Start: 76 @41405 has 1 MA's), (86, 41438), (94, 41456), (146, 41585), (160, 41609), (174, 41657), (191, 41714), (328, 41942), (340, 41987), (342, 41996), (362, 42047),

Gene: Fionnbharth_71 Start: 43878, Stop: 44723, Start Num: 37

Candidate Starts for Fionnbharth_71:

(26, 43827), (Start: 37 @43878 has 44 MA's), (Start: 42 @43905 has 1 MA's), (48, 43935), (168, 44163), (170, 44175), (Start: 185 @44223 has 2 MA's), (209, 44289), (328, 44463), (351, 44541), (362, 44568), (367, 44607),

Gene: Fitzgerald_83 Start: 58102, Stop: 58800, Start Num: 155

Candidate Starts for Fitzgerald_83:

(7, 57355), (45, 57724), (61, 57790), (123, 58027), (132, 58051), (Start: 155 @58102 has 76 MA's), (172, 58150), (174, 58159), (176, 58171), (218, 58279), (237, 58339), (271, 58420), (278, 58435), (285, 58456), (333, 58588), (344, 58621), (362, 58663), (368, 58708), (375, 58741), (380, 58768), (386, 58789),

Gene: Flakey_46 Start: 45132, Stop: 44410, Start Num: 156

Candidate Starts for Flakey_46:

(Start: 156 @45132 has 64 MA's), (171, 45093), (178, 45066), (191, 45015), (217, 44940), (220, 44925), (264, 44841), (295, 44766), (343, 44610), (363, 44562), (365, 44532), (385, 44430),

Gene: Flathead_72 Start: 45157, Stop: 46023, Start Num: 114

Candidate Starts for Flathead_72:

(87, 45073), (91, 45085), (Start: 114 @45157 has 3 MA's), (Start: 152 @45256 has 16 MA's), (165, 45286), (175, 45319), (176, 45328), (188, 45376), (205, 45409), (228, 45478), (251, 45550), (262,

45574), (270, 45589), (328, 45760), (338, 45796), (359, 45862), (362, 45868), (380, 45973), (383, 45991),

Gene: Forge_62 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for Forge_62:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: Fosterous_87 Start: 58250, Stop: 58948, Start Num: 155

Candidate Starts for Fosterous_87:

(123, 58175), (132, 58199), (Start: 155 @58250 has 76 MA's), (172, 58298), (174, 58307), (176, 58319), (218, 58427), (237, 58487), (271, 58568), (278, 58583), (285, 58604), (333, 58736), (344, 58769), (362, 58811), (368, 58856), (375, 58889), (380, 58916), (386, 58937),

Gene: Francois_66 Start: 42774, Stop: 43487, Start Num: 155

Candidate Starts for Francois_66:

(71, 42540), (113, 42669), (Start: 155 @42774 has 76 MA's), (165, 42801), (184, 42867), (228, 42975), (285, 43125), (303, 43179), (323, 43236), (343, 43287), (344, 43290), (349, 43302), (360, 43329), (362, 43332), (365, 43365), (386, 43458),

Gene: Frokostdame_67 Start: 43587, Stop: 44648, Start Num: 36

Candidate Starts for Frokostdame_67:

(Start: 36 @43587 has 3 MA's), (Start: 37 @43590 has 44 MA's), (58, 43686), (69, 43743), (Start: 76 @43776 has 1 MA's), (130, 43920), (166, 44010), (168, 44016), (174, 44040), (184, 44073), (191, 44097), (209, 44142), (212, 44148), (328, 44388), (341, 44436), (362, 44493), (373, 44559),

Gene: Fugax_62 Start: 44257, Stop: 45213, Start Num: 37

Candidate Starts for Fugax_62:

(Start: 37 @44257 has 44 MA's), (58, 44353), (Start: 76 @44443 has 1 MA's), (184, 44713), (191, 44737), (209, 44782), (212, 44788), (266, 44887), (341, 44998), (360, 45052),

Gene: GAL1_56 Start: 38270, Stop: 38929, Start Num: 152

Candidate Starts for GAL1_56:

(53, 37952), (60, 37976), (68, 38027), (75, 38060), (90, 38108), (106, 38156), (111, 38177), (135, 38240), (Start: 152 @38270 has 16 MA's), (183, 38354), (239, 38495), (275, 38573), (282, 38588), (291, 38621), (310, 38660), (312, 38663), (325, 38678), (327, 38687), (360, 38768), (374, 38843), (381, 38885), (383, 38900),

Gene: GMA7_38 Start: 39507, Stop: 38788, Start Num: 156

Candidate Starts for GMA7_38:

(Start: 156 @39507 has 64 MA's), (178, 39441), (186, 39408), (191, 39390), (217, 39315), (220, 39300), (225, 39291), (264, 39216), (295, 39141),

Gene: GTE7_37 Start: 39538, Stop: 38819, Start Num: 156

Candidate Starts for GTE7_37:

(Start: 156 @39538 has 64 MA's), (171, 39499), (178, 39472), (186, 39439), (191, 39421), (217, 39346), (220, 39331), (225, 39322), (264, 39247), (295, 39172),

Gene: GalacticEye_46 Start: 46382, Stop: 45663, Start Num: 156

Candidate Starts for GalacticEye_46:

(Start: 156 @46382 has 64 MA's), (178, 46316), (191, 46265), (195, 46259), (220, 46175), (248, 46130), (264, 46091), (295, 46016), (363, 45812),

Gene: Galadriel_86 Start: 58466, Stop: 59212, Start Num: 155

Candidate Starts for Galadriel_86:

(123, 58391), (132, 58415), (Start: 155 @58466 has 76 MA's), (172, 58514), (174, 58523), (176, 58535), (237, 58733), (242, 58748), (268, 58808), (271, 58814), (272, 58817), (278, 58829), (279, 58835), (285, 58850), (323, 58961), (362, 59075), (368, 59120), (375, 59153), (380, 59180), (386, 59201),

Gene: Galadriel_11 Start: 4990, Stop: 5733, Start Num: 152

Candidate Starts for Galadriel_11:

(Start: 152 @4990 has 16 MA's), (173, 5050), (174, 5053), (184, 5089), (210, 5155), (227, 5200), (232, 5218), (234, 5224), (265, 5302), (288, 5362), (297, 5386), (301, 5395), (313, 5428), (327, 5467), (332, 5476), (345, 5536), (357, 5557), (361, 5575), (362, 5578), (370, 5629), (379, 5677),

Gene: Gancho_66 Start: 44643, Stop: 45305, Start Num: 155

Candidate Starts for Gancho_66:

(50, 44301), (67, 44382), (77, 44427), (82, 44451), (99, 44502), (119, 44556), (Start: 145 @44631 has 18 MA's), (147, 44634), (Start: 155 @44643 has 76 MA's), (165, 44670), (230, 44844), (257, 44922), (258, 44925), (259, 44928), (273, 44952), (281, 44961), (292, 45003), (332, 45087), (339, 45090), (346, 45123), (348, 45129), (352, 45135), (366, 45198), (374, 45234), (379, 45261), (381, 45276), (383, 45285),

Gene: Geralt_67 Start: 45011, Stop: 45679, Start Num: 145

Candidate Starts for Geralt_67:

(Start: 145 @45011 has 18 MA's), (165, 45050), (183, 45104), (189, 45131), (221, 45191), (254, 45281), (258, 45293), (276, 45326), (346, 45491), (360, 45524), (365, 45560), (383, 45650),

Gene: Getalong_67 Start: 41639, Stop: 42277, Start Num: 152

Candidate Starts for Getalong_67:

(136, 41618), (Start: 152 @41639 has 16 MA's), (165, 41669), (183, 41723), (189, 41750), (239, 41852), (275, 41930), (346, 42083), (383, 42248),

Gene: Giles_62 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for Giles_62:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: Gorko_46 Start: 44260, Stop: 43538, Start Num: 156

Candidate Starts for Gorko_46:

(Start: 156 @44260 has 64 MA's), (171, 44221), (178, 44194), (191, 44143), (217, 44068), (220, 44053), (264, 43969), (295, 43894), (343, 43738), (363, 43690), (365, 43660), (385, 43558),

Gene: GourdThymes_46 Start: 45134, Stop: 44412, Start Num: 156

Candidate Starts for GourdThymes_46:

(Start: 156 @45134 has 64 MA's), (171, 45095), (178, 45068), (191, 45017), (217, 44942), (220, 44927), (264, 44843), (295, 44768), (343, 44612), (363, 44564), (365, 44534), (385, 44432),

Gene: GrandSlam_68 Start: 43754, Stop: 44467, Start Num: 155

Candidate Starts for GrandSlam_68:

(71, 43520), (113, 43649), (Start: 155 @43754 has 76 MA's), (165, 43781), (184, 43847), (272, 44072), (285, 44105), (303, 44159), (323, 44216), (343, 44267), (344, 44270), (360, 44309), (365, 44345),

Gene: Gravaillia_63 Start: 44924, Stop: 45586, Start Num: 155

Candidate Starts for Gravaillia_63:

(50, 44582), (67, 44663), (77, 44708), (82, 44732), (99, 44783), (119, 44837), (Start: 145 @44912 has 18 MA's), (147, 44915), (Start: 155 @44924 has 76 MA's), (165, 44951), (230, 45125), (257, 45203), (259, 45209), (273, 45233), (281, 45242), (292, 45284), (332, 45368), (339, 45371), (346, 45404), (348, 45410), (352, 45416), (366, 45479), (374, 45515), (379, 45542), (381, 45557), (383, 45566),

Gene: GrecoEtereo_68 Start: 43047, Stop: 42184, Start Num: 34

Candidate Starts for GrecoEtereo_68:

(Start: 27 @43062 has 1 MA's), (Start: 34 @43047 has 5 MA's), (Start: 36 @43026 has 3 MA's), (Start: 42 @42996 has 1 MA's), (43, 42993), (49, 42963), (52, 42954), (78, 42834), (170, 42726), (191, 42657), (222, 42582), (340, 42396), (349, 42366), (384, 42207),

Gene: Greg_69 Start: 43455, Stop: 42613, Start Num: 36

Candidate Starts for Greg_69:

(Start: 27 @43491 has 1 MA's), (Start: 34 @43476 has 5 MA's), (Start: 36 @43455 has 3 MA's), (Start: 42 @43425 has 1 MA's), (43, 43422), (49, 43392), (52, 43383), (78, 43263), (170, 43155), (191, 43086), (222, 43011), (340, 42825), (349, 42795), (384, 42636),

Gene: Gudmit_63 Start: 37864, Stop: 38583, Start Num: 152

Candidate Starts for Gudmit_63:

(Start: 152 @37864 has 16 MA's), (165, 37894), (174, 37924), (176, 37936), (242, 38116), (278, 38197), (285, 38218), (343, 38380), (349, 38395), (362, 38425), (388, 38554),

Gene: Guillaume_46 Start: 46432, Stop: 45713, Start Num: 156

Candidate Starts for Guillaume_46:

(Start: 156 @46432 has 64 MA's), (178, 46366), (191, 46315), (195, 46309), (220, 46225), (248, 46180), (264, 46141), (295, 46066), (299, 46057), (363, 45862),

Gene: HC_55 Start: 36568, Stop: 37686, Start Num: 20

Candidate Starts for HC_55:

(14, 36517), (16, 36532), (Start: 20 @36568 has 1 MA's), (Start: 37 @36679 has 44 MA's), (Start: 42 @36709 has 1 MA's), (58, 36778), (63, 36802), (65, 36817), (Start: 76 @36868 has 1 MA's), (86, 36901), (146, 37048), (160, 37072), (174, 37120), (191, 37177), (209, 37222), (315, 37384), (328, 37423), (362, 37528),

Gene: HH92_66 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for HH92_66:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: Hadrien_66 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for Hadrien_66:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: Hail_62 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for Hail_62:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: Hail2Pitt_45 Start: 46908, Stop: 46189, Start Num: 156

Candidate Starts for Hail2Pitt_45:

(Start: 156 @46908 has 64 MA's), (178, 46842), (191, 46791), (195, 46785), (220, 46701), (248, 46656), (264, 46617), (295, 46542), (299, 46533), (363, 46338),

Gene: Hamood_68 Start: 43754, Stop: 44467, Start Num: 155

Candidate Starts for Hamood_68:

(71, 43520), (113, 43649), (Start: 155 @43754 has 76 MA's), (165, 43781), (184, 43847), (272, 44072), (285, 44105), (303, 44159), (323, 44216), (343, 44267), (344, 44270), (360, 44309), (365, 44345),

Gene: Hamulus_73 Start: 46052, Stop: 46708, Start Num: 155

Candidate Starts for Hamulus_73:

(101, 45920), (Start: 148 @46043 has 10 MA's), (Start: 155 @46052 has 76 MA's), (157, 46058), (183, 46133), (189, 46160), (221, 46220), (254, 46310), (258, 46322), (276, 46355), (282, 46370), (346, 46520), (360, 46553), (365, 46589), (383, 46679),

Gene: Harambe_46 Start: 46699, Stop: 45980, Start Num: 156

Candidate Starts for Harambe_46:

(Start: 156 @46699 has 64 MA's), (178, 46633), (191, 46582), (195, 46576), (220, 46492), (248, 46447), (260, 46414), (264, 46408), (295, 46333), (363, 46129),

Gene: HarryOW_66 Start: 43503, Stop: 42691, Start Num: 42

Candidate Starts for HarryOW_66:

(Start: 27 @43569 has 1 MA's), (Start: 34 @43554 has 5 MA's), (Start: 36 @43533 has 3 MA's), (Start: 42 @43503 has 1 MA's), (43, 43500), (49, 43470), (52, 43461), (78, 43341), (170, 43233), (191, 43164), (222, 43089), (340, 42903), (349, 42873), (384, 42714),

Gene: HayZem_48 Start: 45290, Stop: 44571, Start Num: 156

Candidate Starts for HayZem_48:

(Start: 156 @45290 has 64 MA's), (171, 45251), (178, 45224), (186, 45191), (191, 45173), (217, 45098), (220, 45083), (225, 45074), (264, 44999), (295, 44924),

Gene: Hegedechwinu_81 Start: 47355, Stop: 48155, Start Num: 148

Candidate Starts for Hegedechwinu_81:

(Start: 148 @47355 has 10 MA's), (Start: 150 @47358 has 1 MA's), (165, 47391), (175, 47424), (176, 47433), (188, 47481), (205, 47514), (228, 47583), (251, 47655), (262, 47679), (270, 47694), (328, 47865), (338, 47901), (359, 47967), (362, 47973), (380, 48078), (383, 48096), (395, 48126),

Gene: Hello_46 Start: 46661, Stop: 45942, Start Num: 156

Candidate Starts for Hello_46:

(Start: 156 @46661 has 64 MA's), (178, 46595), (191, 46544), (195, 46538), (220, 46454), (248, 46409), (264, 46370), (295, 46295), (363, 46091),

Gene: Hollow_43 Start: 45997, Stop: 45281, Start Num: 156

Candidate Starts for Hollow_43:

(Start: 156 @45997 has 64 MA's), (162, 45982), (191, 45880), (220, 45790), (223, 45784), (295, 45631), (322, 45568), (329, 45538), (343, 45475), (381, 45316),

Gene: Hotorobo_46 Start: 45139, Stop: 44417, Start Num: 156

Candidate Starts for Hotorobo_46:

(Start: 156 @45139 has 64 MA's), (171, 45100), (178, 45073), (191, 45022), (217, 44947), (220, 44932), (264, 44848), (295, 44773), (343, 44617), (363, 44569), (365, 44539), (385, 44437),

Gene: Hyzer_73 Start: 48832, Stop: 49506, Start Num: 155

Candidate Starts for Hyzer_73:

(Start: 152 @48829 has 16 MA's), (Start: 155 @48832 has 76 MA's), (165, 48859), (183, 48913), (189, 48940), (226, 49021), (230, 49030), (275, 49132), (307, 49216), (346, 49318), (362, 49354), (375, 49432), (383, 49477),

Gene: lbhubesi_66 Start: 42310, Stop: 42972, Start Num: 155

Candidate Starts for lbhubesi_66:

(86, 42133), (88, 42139), (92, 42148), (126, 42253), (Start: 155 @42310 has 76 MA's), (183, 42391), (261, 42583), (287, 42643), (344, 42781), (346, 42784), (374, 42892), (381, 42934), (383, 42943),

Gene: Ibrahim_60 Start: 41425, Stop: 42162, Start Num: 161

Candidate Starts for Ibrahim_60:

(38, 41008), (99, 41266), (102, 41272), (Start: 161 @41425 has 7 MA's), (174, 41467), (194, 41539), (203, 41557), (246, 41683), (252, 41701), (298, 41815), (309, 41851), (324, 41896), (346, 41980), (350, 41989), (352, 41992), (358, 42001), (362, 42019), (388, 42151),

Gene: Inventum_72 Start: 45927, Stop: 46595, Start Num: 145

Candidate Starts for Inventum_72:

(Start: 145 @45927 has 18 MA's), (165, 45966), (183, 46020), (189, 46047), (221, 46107), (254, 46197), (258, 46209), (276, 46242), (346, 46407), (360, 46440), (365, 46476), (383, 46566),

Gene: Island3_55 Start: 37346, Stop: 37996, Start Num: 155

Candidate Starts for Island3_55:

(Start: 155 @37346 has 76 MA's), (226, 37532), (239, 37568), (244, 37583), (246, 37586), (291, 37694), (331, 37760), (348, 37814), (362, 37844), (383, 37967),

Gene: JF1_71 Start: 43844, Stop: 44689, Start Num: 37

Candidate Starts for JF1_71:

(Start: 37 @43844 has 44 MA's), (Start: 42 @43871 has 1 MA's), (48, 43901), (168, 44129), (170, 44141), (Start: 185 @44189 has 2 MA's), (209, 44255), (328, 44429), (351, 44507), (362, 44534), (367, 44573),

Gene: JKSyngboy_82 Start: 57242, Stop: 57988, Start Num: 152

Candidate Starts for JKSyngboy_82:

(7, 56504), (39, 56852), (123, 57170), (132, 57194), (Start: 152 @57242 has 16 MA's), (167, 57275), (172, 57290), (174, 57299), (176, 57311), (229, 57479), (237, 57509), (242, 57524), (271, 57590), (272, 57593), (278, 57605), (279, 57611), (285, 57626), (309, 57704), (362, 57851), (368, 57896), (381, 57965),

Gene: Jabberwocky_84 Start: 58563, Stop: 59261, Start Num: 155

Candidate Starts for Jabberwocky_84:

(7, 57816), (45, 58185), (61, 58251), (123, 58488), (132, 58512), (Start: 155 @58563 has 76 MA's), (172, 58611), (174, 58620), (176, 58632), (218, 58740), (237, 58800), (271, 58881), (278, 58896),

(285, 58917), (333, 59049), (344, 59082), (362, 59124), (368, 59169), (375, 59202), (380, 59229), (386, 59250),

Gene: JalFarm20_88 Start: 49372, Stop: 50172, Start Num: 148

Candidate Starts for JalFarm20_88:

(Start: 148 @49372 has 10 MA's), (Start: 150 @49375 has 1 MA's), (165, 49408), (175, 49441), (176, 49450), (188, 49498), (205, 49531), (228, 49600), (251, 49672), (262, 49696), (270, 49711), (328, 49882), (338, 49918), (359, 49984), (362, 49990), (380, 50095), (383, 50113), (395, 50143),

Gene: JalFarm20_79 Start: 46369, Stop: 47022, Start Num: 155

Candidate Starts for JalFarm20_79:

(103, 46255), (Start: 155 @46369 has 76 MA's), (183, 46450), (189, 46477), (216, 46516), (239, 46588), (254, 46624), (276, 46669), (296, 46732), (344, 46831), (346, 46834), (360, 46867), (383, 46993),

Gene: Jams_46 Start: 45870, Stop: 45151, Start Num: 156

Candidate Starts for Jams_46:

(Start: 156 @45870 has 64 MA's), (178, 45804), (187, 45762), (191, 45753), (195, 45747), (220, 45663), (248, 45618), (260, 45585), (264, 45579), (295, 45504), (363, 45300),

Gene: Jellybones_49 Start: 46241, Stop: 45519, Start Num: 156

Candidate Starts for Jellybones_49:

(Start: 156 @46241 has 64 MA's), (171, 46202), (178, 46175), (186, 46142), (191, 46124), (217, 46049), (220, 46034), (264, 45950), (295, 45875), (343, 45719), (363, 45671), (365, 45641), (385, 45539),

Gene: Jinkies_19 Start: 14524, Stop: 15195, Start Num: 155

Candidate Starts for Jinkies_19:

(115, 14434), (151, 14518), (Start: 155 @14524 has 76 MA's), (183, 14608), (189, 14635), (226, 14701), (246, 14752), (291, 14863), (346, 15013), (347, 15016), (360, 15046), (379, 15148), (381, 15163),

Gene: JoeyJr_74 Start: 46916, Stop: 47584, Start Num: 145

Candidate Starts for JoeyJr_74:

(Start: 145 @46916 has 18 MA's), (165, 46955), (183, 47009), (189, 47036), (221, 47096), (254, 47186), (258, 47198), (276, 47231), (346, 47396), (360, 47429), (365, 47465), (383, 47555),

Gene: John316_50 Start: 46297, Stop: 45575, Start Num: 156

Candidate Starts for John316_50:

(Start: 156 @46297 has 64 MA's), (171, 46258), (178, 46231), (191, 46180), (217, 46105), (220, 46090), (264, 46006), (295, 45931), (343, 45775), (363, 45727), (365, 45697), (385, 45595),

Gene: Jormungandr_46 Start: 46414, Stop: 45695, Start Num: 156

Candidate Starts for Jormungandr_46:

(Start: 156 @46414 has 64 MA's), (178, 46348), (191, 46297), (195, 46291), (220, 46207), (248, 46162), (264, 46123), (295, 46048), (299, 46039), (363, 45844),

Gene: Journey_58 Start: 36648, Stop: 37631, Start Num: 37

Candidate Starts for Journey_58:

(Start: 37 @36648 has 44 MA's), (Start: 42 @36675 has 1 MA's), (52, 36717), (Start: 76 @36834 has 1 MA's), (84, 36864), (149, 37020), (191, 37143), (209, 37188), (212, 37194), (229, 37236), (328, 37362), (341, 37410), (349, 37437),

Gene: Journey_57 Start: 35945, Stop: 36610, Start Num: 152

Candidate Starts for Journey_57:

(104, 35843), (109, 35852), (118, 35879), (Start: 152 @35945 has 16 MA's), (165, 35975), (183, 36029), (287, 36281), (346, 36422), (352, 36434), (360, 36455), (383, 36581),

Gene: Juice456_67 Start: 44325, Stop: 44978, Start Num: 155

Candidate Starts for Juice456_67:

(103, 44211), (Start: 155 @44325 has 76 MA's), (183, 44406), (189, 44433), (216, 44472), (239, 44544), (254, 44580), (276, 44625), (296, 44688), (344, 44787), (346, 44790), (360, 44823), (383, 44949),

Gene: JuliaChild_70 Start: 44385, Stop: 43519, Start Num: 31

Candidate Starts for JuliaChild_70:

(Start: 24 @44412 has 1 MA's), (29, 44391), (Start: 31 @44385 has 6 MA's), (Start: 42 @44328 has 1 MA's), (43, 44325), (49, 44295), (52, 44286), (78, 44166), (170, 44058), (191, 43989), (222, 43914), (340, 43728), (349, 43698), (384, 43539),

Gene: Juliette_73 Start: 43942, Stop: 44787, Start Num: 37

Candidate Starts for Juliette_73:

(26, 43891), (Start: 37 @43942 has 44 MA's), (Start: 42 @43969 has 1 MA's), (48, 43999), (168, 44227), (170, 44239), (Start: 185 @44287 has 2 MA's), (209, 44353), (328, 44527), (351, 44605), (362, 44632), (367, 44671),

Gene: Jung_56 Start: 37454, Stop: 38110, Start Num: 155

Candidate Starts for Jung_56:

(Start: 148 @37445 has 10 MA's), (Start: 155 @37454 has 76 MA's), (157, 37460), (183, 37535), (189, 37562), (221, 37622), (254, 37712), (258, 37724), (276, 37757), (346, 37922), (360, 37955), (365, 37991), (383, 38081), (392, 38102),

Gene: Juniormint_55 Start: 36637, Stop: 37290, Start Num: 148

Candidate Starts for Juniormint_55:

(Start: 112 @36556 has 1 MA's), (116, 36565), (125, 36592), (Start: 148 @36637 has 10 MA's), (165, 36670), (189, 36751), (221, 36811), (254, 36901), (258, 36913), (276, 36946), (346, 37111), (360, 37144), (365, 37180), (379, 37246), (383, 37270),

Gene: Juniper1_69 Start: 44073, Stop: 44747, Start Num: 155

Candidate Starts for Juniper1_69:

(131, 44025), (Start: 155 @44073 has 76 MA's), (165, 44100), (183, 44154), (204, 44202), (230, 44280), (239, 44304), (245, 44319), (247, 44322), (309, 44475), (325, 44496), (326, 44499), (353, 44574), (365, 44628), (383, 44718),

Gene: Juniper1_68 Start: 43088, Stop: 44041, Start Num: 37

Candidate Starts for Juniper1_68:

(12, 42911), (14, 42926), (25, 43031), (Start: 37 @43088 has 44 MA's), (Start: 42 @43115 has 1 MA's), (44, 43121), (48, 43145), (Start: 76 @43274 has 1 MA's), (80, 43283), (84, 43304), (191, 43541), (200, 43553), (205, 43565), (212, 43592), (231, 43646), (294, 43712), (312, 43745), (328, 43781), (362, 43886),

Gene: KSSJEB_67 Start: 42872, Stop: 42006, Start Num: 34

Candidate Starts for KSSJEB_67:

(Start: 27 @42887 has 1 MA's), (Start: 34 @42872 has 5 MA's), (Start: 36 @42851 has 3 MA's), (Start: 42 @42818 has 1 MA's), (43, 42815), (49, 42785), (52, 42776), (78, 42656), (170, 42548), (191, 42479), (222, 42404), (340, 42218), (349, 42188), (384, 42029),

Gene: Kamashten_10 Start: 5311, Stop: 6054, Start Num: 152

Candidate Starts for Kamashten_10:

(Start: 152 @5311 has 16 MA's), (173, 5371), (174, 5374), (184, 5410), (210, 5476), (227, 5521), (232, 5539), (234, 5545), (265, 5623), (288, 5683), (297, 5707), (301, 5716), (313, 5749), (327, 5788), (332, 5797), (345, 5857), (357, 5878), (361, 5896), (362, 5899), (370, 5950), (379, 5998),

Gene: Kamashten_86 Start: 58360, Stop: 59106, Start Num: 155

Candidate Starts for Kamashten_86:

(123, 58285), (132, 58309), (Start: 155 @58360 has 76 MA's), (172, 58408), (174, 58417), (176, 58429), (237, 58627), (242, 58642), (268, 58702), (271, 58708), (272, 58711), (278, 58723), (279, 58729), (285, 58744), (323, 58855), (362, 58969), (368, 59014), (375, 59047), (380, 59074), (386, 59095),

Gene: Kaseim_46 Start: 45855, Stop: 45136, Start Num: 156

Candidate Starts for Kaseim_46:

(Start: 156 @45855 has 64 MA's), (178, 45789), (187, 45747), (191, 45738), (195, 45732), (220, 45648), (248, 45603), (260, 45570), (264, 45564), (295, 45489), (363, 45285),

Gene: Katyusha_42 Start: 45651, Stop: 44935, Start Num: 156

Candidate Starts for Katyusha_42:

(Start: 156 @45651 has 64 MA's), (162, 45636), (191, 45534), (220, 45444), (223, 45438), (295, 45285), (322, 45222), (329, 45192), (381, 44970),

Gene: Keitabear_83 Start: 58873, Stop: 59571, Start Num: 155

Candidate Starts for Keitabear_83:

(7, 58126), (45, 58495), (61, 58561), (123, 58798), (132, 58822), (Start: 155 @58873 has 76 MA's), (172, 58921), (174, 58930), (176, 58942), (218, 59050), (237, 59110), (271, 59191), (278, 59206), (285, 59227), (333, 59359), (344, 59392), (362, 59434), (368, 59479), (375, 59512), (380, 59539), (386, 59560),

Gene: KimmyK_60 Start: 44699, Stop: 45655, Start Num: 37

Candidate Starts for KimmyK_60:

(Start: 37 @44699 has 44 MA's), (58, 44795), (Start: 76 @44885 has 1 MA's), (184, 45155), (191, 45179), (209, 45224), (212, 45230), (266, 45329), (341, 45440), (360, 45494),

Gene: Kinbote_65 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for Kinbote_65:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: KingMidas_73 Start: 46330, Stop: 46998, Start Num: 145

Candidate Starts for KingMidas_73:

(Start: 145 @46330 has 18 MA's), (165, 46369), (183, 46423), (189, 46450), (221, 46510), (254, 46600), (258, 46612), (276, 46645), (346, 46810), (360, 46843), (365, 46879), (383, 46969),

Gene: KristaRAM_69 Start: 44694, Stop: 45347, Start Num: 155

Candidate Starts for KristaRAM_69:

(103, 44580), (Start: 155 @44694 has 76 MA's), (183, 44775), (189, 44802), (216, 44841), (239, 44913), (254, 44949), (276, 44994), (296, 45057), (344, 45156), (346, 45159), (360, 45192), (383, 45318),

Gene: Kvothe_42 Start: 45550, Stop: 44834, Start Num: 156

Candidate Starts for Kvothe_42:

(Start: 156 @45550 has 64 MA's), (162, 45535), (191, 45433), (220, 45343), (223, 45337), (295, 45184), (322, 45121), (329, 45091), (381, 44869),

Gene: Lahirium_46 Start: 46936, Stop: 46217, Start Num: 156

Candidate Starts for Lahirium_46:

(Start: 156 @46936 has 64 MA's), (178, 46870), (191, 46819), (195, 46813), (220, 46729), (248, 46684), (264, 46645), (295, 46570), (299, 46561), (363, 46366),

Gene: Lamina13_71 Start: 44833, Stop: 43967, Start Num: 31

Candidate Starts for Lamina13_71:

(Start: 24 @44860 has 1 MA's), (29, 44839), (Start: 31 @44833 has 6 MA's), (Start: 42 @44776 has 1 MA's), (43, 44773), (49, 44743), (52, 44734), (78, 44614), (170, 44506), (191, 44437), (222, 44362), (340, 44176), (349, 44146), (384, 43987),

Gene: Lennon_85 Start: 59303, Stop: 60049, Start Num: 155

Candidate Starts for Lennon_85:

(7, 58556), (45, 58925), (61, 58991), (123, 59228), (132, 59252), (Start: 155 @59303 has 76 MA's), (172, 59351), (174, 59360), (176, 59372), (237, 59570), (242, 59585), (268, 59645), (271, 59651), (272, 59654), (278, 59666), (279, 59672), (285, 59687), (323, 59798), (362, 59912), (368, 59957), (375, 59990), (380, 60017), (386, 60038),

Gene: Leperchaun_72 Start: 46150, Stop: 46818, Start Num: 145

Candidate Starts for Leperchaun_72:

(Start: 145 @46150 has 18 MA's), (165, 46189), (183, 46243), (189, 46270), (221, 46330), (254, 46420), (258, 46432), (276, 46465), (346, 46630), (360, 46663), (365, 46699), (383, 46789),

Gene: Lidong_46 Start: 46670, Stop: 45951, Start Num: 156

Candidate Starts for Lidong_46:

(Start: 156 @46670 has 64 MA's), (178, 46604), (187, 46562), (191, 46553), (195, 46547), (220, 46463), (248, 46418), (260, 46385), (264, 46379), (295, 46304), (363, 46100),

Gene: LilHazelnut_67 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for LilHazelnut_67:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: Linetti_47 Start: 45752, Stop: 45030, Start Num: 156

Candidate Starts for Linetti_47:

(136, 45794), (Start: 156 @45752 has 64 MA's), (171, 45713), (178, 45686), (191, 45635), (217, 45560), (220, 45545), (264, 45461), (295, 45386), (343, 45230), (363, 45182), (365, 45152), (385, 45050),

Gene: LittleShirley_66 Start: 43146, Stop: 43808, Start Num: 155

Candidate Starts for LittleShirley_66:

(86, 42969), (Start: 155 @43146 has 76 MA's), (165, 43173), (183, 43227), (287, 43479), (346, 43620), (352, 43632), (360, 43653), (383, 43779),

Gene: LittleShirley_73 Start: 45098, Stop: 45754, Start Num: 155

Candidate Starts for LittleShirley_73:

(101, 44966), (Start: 148 @45089 has 10 MA's), (Start: 155 @45098 has 76 MA's), (157, 45104), (183, 45179), (189, 45206), (221, 45266), (254, 45356), (258, 45368), (276, 45401), (282, 45416), (346, 45566), (360, 45599), (365, 45635), (383, 45725),

Gene: Lizzo_46 Start: 45128, Stop: 44406, Start Num: 156

Candidate Starts for Lizzo_46:

(Start: 156 @45128 has 64 MA's), (171, 45089), (178, 45062), (191, 45011), (217, 44936), (220, 44921), (264, 44837), (295, 44762), (343, 44606), (363, 44558), (365, 44528), (385, 44426),

Gene: Love_91 Start: 59114, Stop: 59854, Start Num: 155

Candidate Starts for Love_91:

(123, 59039), (132, 59063), (Start: 155 @59114 has 76 MA's), (167, 59147), (172, 59162), (174, 59171), (176, 59183), (197, 59249), (237, 59375), (242, 59390), (271, 59456), (272, 59459), (278, 59471), (285, 59492), (323, 59603), (362, 59717), (368, 59762), (375, 59795), (380, 59822), (386, 59843),

Gene: Love_11 Start: 5310, Stop: 6053, Start Num: 152

Candidate Starts for Love_11:

(Start: 152 @5310 has 16 MA's), (173, 5370), (174, 5373), (184, 5409), (210, 5475), (227, 5520), (232, 5538), (234, 5544), (265, 5622), (288, 5682), (297, 5706), (301, 5715), (313, 5748), (327, 5787), (332, 5796), (345, 5856), (357, 5877), (361, 5895), (362, 5898), (370, 5949), (379, 5997),

Gene: Luke_66 Start: 44871, Stop: 45533, Start Num: 155

Candidate Starts for Luke_66:

(50, 44529), (67, 44610), (77, 44655), (82, 44679), (99, 44730), (119, 44784), (Start: 145 @44859 has 18 MA's), (147, 44862), (Start: 155 @44871 has 76 MA's), (165, 44898), (230, 45072), (257, 45150), (259, 45156), (273, 45180), (281, 45189), (292, 45231), (332, 45315), (339, 45318), (346, 45351), (348, 45357), (352, 45363), (366, 45426), (374, 45462), (379, 45489), (381, 45504), (383, 45513),

Gene: Luker_47 Start: 46889, Stop: 46170, Start Num: 156

Candidate Starts for Luker_47:

(Start: 156 @46889 has 64 MA's), (178, 46823), (191, 46772), (195, 46766), (220, 46682), (248, 46637), (264, 46598), (295, 46523), (363, 46319),

Gene: Luna22_62 Start: 44900, Stop: 45562, Start Num: 155

Candidate Starts for Luna22_62:

(50, 44558), (67, 44639), (77, 44684), (82, 44708), (99, 44759), (119, 44813), (Start: 145 @44888 has 18 MA's), (147, 44891), (Start: 155 @44900 has 76 MA's), (165, 44927), (230, 45101), (257, 45179), (259, 45185), (273, 45209), (281, 45218), (292, 45260), (332, 45344), (339, 45347), (346, 45380), (348, 45386), (352, 45392), (366, 45455), (374, 45491), (379, 45518), (381, 45533), (383, 45542),

Gene: Malthus_72 Start: 43630, Stop: 44475, Start Num: 37

Candidate Starts for Malthus_72:

(26, 43579), (Start: 37 @43630 has 44 MA's), (Start: 42 @43657 has 1 MA's), (48, 43687), (168, 43915), (170, 43927), (Start: 185 @43975 has 2 MA's), (209, 44041), (328, 44215), (351, 44293), (362, 44320), (367, 44359),

Gene: Mantra_63 Start: 41560, Stop: 42504, Start Num: 37

Candidate Starts for Mantra_63:

(Start: 37 @41560 has 44 MA's), (73, 41737), (Start: 76 @41746 has 1 MA's), (86, 41779), (129, 41854), (191, 42025), (209, 42070), (212, 42076), (249, 42133), (294, 42184), (328, 42244), (340, 42289), (343, 42304), (362, 42349),

Gene: Marchy_59 Start: 40436, Stop: 39594, Start Num: 36

Candidate Starts for Marchy_59:

(Start: 27 @40472 has 1 MA's), (Start: 34 @40457 has 5 MA's), (Start: 36 @40436 has 3 MA's), (Start: 42 @40406 has 1 MA's), (43, 40403), (49, 40373), (52, 40364), (78, 40244), (170, 40136), (191, 40067), (222, 39992), (340, 39806), (349, 39776), (384, 39617),

Gene: Marker_68 Start: 42811, Stop: 43545, Start Num: 155

Candidate Starts for Marker_68:

(90, 42634), (93, 42640), (96, 42649), (130, 42754), (Start: 155 @42811 has 76 MA's), (174, 42868), (175, 42871), (176, 42880), (184, 42904), (210, 42970), (227, 43015), (236, 43042), (238, 43048), (255, 43096), (265, 43117), (287, 43174), (288, 43177), (297, 43201), (309, 43237), (313, 43243), (323, 43270), (354, 43369), (362, 43393), (365, 43426), (383, 43516),

Gene: Mbo4_26 Start: 25859, Stop: 26965, Start Num: 37

Candidate Starts for Mbo4_26:

(Start: 37 @25859 has 44 MA's), (52, 25931), (Start: 76 @26048 has 1 MA's), (84, 26078), (95, 26105), (170, 26255), (191, 26324), (209, 26369), (267, 26525), (328, 26705), (341, 26753), (373, 26876), (379, 26909), (380, 26915), (387, 26942),

Gene: McKinley_88 Start: 58094, Stop: 58834, Start Num: 155

Candidate Starts for McKinley_88:

(6, 57293), (7, 57347), (45, 57716), (61, 57782), (123, 58019), (132, 58043), (Start: 155 @58094 has 76 MA's), (167, 58127), (172, 58142), (174, 58151), (176, 58163), (237, 58355), (242, 58370), (271, 58436), (272, 58439), (278, 58451), (285, 58472), (323, 58583), (362, 58697), (368, 58742), (375, 58775), (380, 58802), (386, 58823),

Gene: Megiddo_59 Start: 40265, Stop: 41059, Start Num: 152

Candidate Starts for Megiddo_59:

(Start: 152 @40265 has 16 MA's), (174, 40325), (176, 40337), (184, 40361), (201, 40412), (256, 40568), (277, 40610), (283, 40628), (309, 40709), (344, 40829), (346, 40832), (352, 40844), (364, 40886), (366, 40907), (368, 40916), (369, 40919), (377, 40955), (378, 40964), (390, 41009), (396, 41033),

Gene: Mendokysei_64 Start: 42338, Stop: 43075, Start Num: 161

Candidate Starts for Mendokysei_64:

(Start: 161 @42338 has 7 MA's), (167, 42356), (174, 42380), (194, 42452), (246, 42596), (298, 42728), (309, 42764), (324, 42809), (346, 42893), (352, 42905), (362, 42932),

Gene: Minos_47 Start: 46412, Stop: 45693, Start Num: 156

Candidate Starts for Minos_47:

(Start: 156 @46412 has 64 MA's), (178, 46346), (187, 46304), (191, 46295), (195, 46289), (220, 46205), (248, 46160), (260, 46127), (264, 46121), (295, 46046), (363, 45842),

Gene: MissDaisy_68 Start: 42544, Stop: 43389, Start Num: 37

Candidate Starts for MissDaisy_68:

(26, 42493), (Start: 37 @42544 has 44 MA's), (Start: 42 @42571 has 1 MA's), (48, 42601), (168, 42829), (170, 42841), (Start: 185 @42889 has 2 MA's), (209, 42955), (304, 43078), (328, 43129), (351, 43207), (362, 43234), (367, 43273), (389, 43372),

Gene: Mitti_71 Start: 43785, Stop: 44630, Start Num: 37

Candidate Starts for Mitti_71:

(26, 43734), (Start: 37 @43785 has 44 MA's), (Start: 42 @43812 has 1 MA's), (48, 43842), (168, 44070), (170, 44082), (Start: 185 @44130 has 2 MA's), (209, 44196), (328, 44370), (351, 44448), (362, 44475), (367, 44514),

Gene: Monty_45 Start: 44278, Stop: 43556, Start Num: 156

Candidate Starts for Monty_45:

(Start: 156 @44278 has 64 MA's), (171, 44239), (178, 44212), (191, 44161), (217, 44086), (220, 44071), (264, 43987), (295, 43912), (343, 43756), (363, 43708), (365, 43678), (385, 43576),

Gene: MoontowerMania_8 Start: 4709, Stop: 5452, Start Num: 152

Candidate Starts for MoontowerMania_8:

(Start: 152 @4709 has 16 MA's), (173, 4769), (174, 4772), (184, 4808), (210, 4874), (227, 4919), (232, 4937), (234, 4943), (265, 5021), (288, 5081), (297, 5105), (301, 5114), (313, 5147), (327, 5186), (332, 5195), (345, 5255), (357, 5276), (361, 5294), (362, 5297), (370, 5348), (379, 5396),

Gene: MrWormie_46 Start: 45573, Stop: 44854, Start Num: 156

Candidate Starts for MrWormie_46:

(Start: 156 @45573 has 64 MA's), (178, 45507), (187, 45465), (191, 45456), (195, 45450), (220, 45366), (248, 45321), (260, 45288), (264, 45282), (295, 45207), (363, 45003),

Gene: Msay19_51 Start: 46751, Stop: 46029, Start Num: 156

Candidate Starts for Msay19_51:

(Start: 156 @46751 has 64 MA's), (171, 46712), (178, 46685), (191, 46634), (217, 46559), (220, 46544), (264, 46460), (295, 46385), (343, 46229), (363, 46181), (365, 46151), (385, 46049),

Gene: Mulch_66 Start: 42588, Stop: 43298, Start Num: 155

Candidate Starts for Mulch_66:

(71, 42354), (113, 42483), (Start: 155 @42588 has 76 MA's), (165, 42615), (184, 42681), (272, 42906), (285, 42939), (303, 42993), (323, 43050), (343, 43101), (344, 43104), (365, 43179),

Gene: Nadeem_66 Start: 42576, Stop: 43286, Start Num: 155

Candidate Starts for Nadeem_66:

(71, 42342), (113, 42471), (Start: 155 @42576 has 76 MA's), (165, 42603), (184, 42669), (272, 42894), (285, 42927), (303, 42981), (323, 43038), (343, 43089), (344, 43092), (365, 43167),

Gene: Nairb_58 Start: 41222, Stop: 41959, Start Num: 161

Candidate Starts for Nairb_58:

(99, 41063), (102, 41069), (Start: 161 @41222 has 7 MA's), (174, 41264), (194, 41336), (203, 41354), (246, 41480), (252, 41498), (298, 41612), (309, 41648), (324, 41693), (346, 41777), (350, 41786), (352, 41789), (358, 41798), (362, 41816), (388, 41948),

Gene: NancyRae_65 Start: 42526, Stop: 43239, Start Num: 155

Candidate Starts for NancyRae_65:

(71, 42292), (113, 42421), (Start: 155 @42526 has 76 MA's), (165, 42553), (184, 42619), (272, 42844), (285, 42877), (303, 42931), (323, 42988), (343, 43039), (344, 43042), (365, 43117),

Gene: Natkenzie_89 Start: 59142, Stop: 59831, Start Num: 155

Candidate Starts for Natkenzie_89:

(55, 58827), (105, 59016), (120, 59061), (129, 59085), (Start: 155 @59142 has 76 MA's), (183, 59223), (199, 59274), (239, 59400), (255, 59439), (289, 59517), (292, 59529), (305, 59550), (324, 59586), (355, 59667),

Gene: Neoevie_46 Start: 46675, Stop: 45956, Start Num: 156

Candidate Starts for Neeve_46:

(Start: 156 @46675 has 64 MA's), (178, 46609), (191, 46558), (195, 46552), (220, 46468), (248, 46423), (264, 46384), (295, 46309), (363, 46105),

Gene: Newt_47 Start: 46903, Stop: 46184, Start Num: 156

Candidate Starts for Newt_47:

(Start: 156 @46903 has 64 MA's), (178, 46837), (187, 46795), (191, 46786), (195, 46780), (220, 46696), (248, 46651), (260, 46618), (264, 46612), (295, 46537), (363, 46333),

Gene: Niagara_42 Start: 45629, Stop: 44913, Start Num: 156

Candidate Starts for Niagara_42:

(Start: 156 @45629 has 64 MA's), (162, 45614), (191, 45512), (220, 45422), (223, 45416), (295, 45263), (322, 45200), (329, 45170), (381, 44948),

Gene: Nimbo_66 Start: 45014, Stop: 45682, Start Num: 145

Candidate Starts for Nimbo_66:

(Start: 145 @45014 has 18 MA's), (165, 45053), (183, 45107), (189, 45134), (221, 45194), (254, 45284), (258, 45296), (276, 45329), (346, 45494), (360, 45527), (365, 45563), (383, 45653),

Gene: Nimi13_46 Start: 46421, Stop: 45702, Start Num: 156

Candidate Starts for Nimi13_46:

(Start: 156 @46421 has 64 MA's), (178, 46355), (187, 46313), (191, 46304), (195, 46298), (220, 46214), (248, 46169), (260, 46136), (264, 46130), (295, 46055), (363, 45851),

Gene: OBUpride_67 Start: 44912, Stop: 45574, Start Num: 155

Candidate Starts for OBUpride_67:

(50, 44570), (67, 44651), (77, 44696), (82, 44720), (99, 44771), (119, 44825), (Start: 145 @44900 has 18 MA's), (147, 44903), (Start: 155 @44912 has 76 MA's), (165, 44939), (230, 45113), (257, 45191), (259, 45197), (273, 45221), (281, 45230), (292, 45272), (332, 45356), (339, 45359), (346, 45392), (348, 45398), (352, 45404), (366, 45467), (374, 45503), (379, 45530), (381, 45545), (383, 45554),

Gene: Ogopogo_78 Start: 45456, Stop: 46199, Start Num: 112

Candidate Starts for Ogopogo_78:

(Start: 112 @45456 has 1 MA's), (116, 45465), (125, 45492), (Start: 148 @45537 has 10 MA's), (165, 45570), (183, 45624), (189, 45651), (221, 45711), (254, 45801), (258, 45813), (276, 45846), (346, 46011), (360, 46044), (365, 46080), (383, 46170),

Gene: Ogopogo_72 Start: 43150, Stop: 43812, Start Num: 155

Candidate Starts for Ogopogo_72:

(108, 43036), (Start: 155 @43150 has 76 MA's), (165, 43177), (183, 43231), (287, 43483), (346, 43624), (360, 43657), (383, 43783),

Gene: Oksu_70 Start: 45599, Stop: 46261, Start Num: 154

Candidate Starts for Oksu_70:

(47, 45245), (127, 45542), (154, 45599), (165, 45626), (183, 45680), (Start: 185 @45686 has 2 MA's), (189, 45707), (193, 45716), (202, 45725), (275, 45911), (282, 45926), (310, 45998), (314, 46007), (317, 46013), (326, 46019), (344, 46070), (346, 46073), (374, 46181), (383, 46232),

Gene: OldBen_71 Start: 46406, Stop: 47074, Start Num: 145

Candidate Starts for OldBen_71:

(Start: 145 @46406 has 18 MA's), (165, 46445), (183, 46499), (189, 46526), (221, 46586), (254, 46676), (258, 46688), (276, 46721), (346, 46886), (360, 46919), (365, 46955), (383, 47045),

Gene: OmniCritical_70 Start: 43718, Stop: 44563, Start Num: 37

Candidate Starts for OmniCritical_70:

(Start: 37 @43718 has 44 MA's), (Start: 42 @43745 has 1 MA's), (48, 43775), (168, 44003), (170, 44015), (Start: 185 @44063 has 2 MA's), (209, 44129), (328, 44303), (351, 44381), (362, 44408), (367, 44447),

Gene: PFR1_39 Start: 29215, Stop: 30003, Start Num: 155

Candidate Starts for PFR1_39:

(28, 28762), (35, 28789), (66, 28948), (Start: 152 @29212 has 16 MA's), (Start: 155 @29215 has 76 MA's), (165, 29242), (174, 29272), (176, 29284), (192, 29341), (194, 29344), (208, 29371), (254, 29515), (277, 29563), (283, 29581), (286, 29593), (309, 29662), (321, 29683), (334, 29722), (346, 29779), (364, 29833), (375, 29896), (376, 29899), (379, 29917),

Gene: PFR2_41 Start: 30784, Stop: 31572, Start Num: 155

Candidate Starts for PFR2_41:

(28, 30331), (35, 30358), (66, 30517), (Start: 152 @30781 has 16 MA's), (Start: 155 @30784 has 76 MA's), (165, 30811), (174, 30841), (176, 30853), (192, 30910), (194, 30913), (208, 30940), (254, 31084), (277, 31132), (283, 31150), (286, 31162), (309, 31231), (321, 31252), (334, 31291), (346, 31348), (364, 31402), (375, 31465), (376, 31468), (379, 31486),

Gene: PHappiness_74 Start: 47235, Stop: 47903, Start Num: 145

Candidate Starts for PHappiness_74:

(Start: 145 @47235 has 18 MA's), (165, 47274), (183, 47328), (189, 47355), (221, 47415), (254, 47505), (258, 47517), (276, 47550), (346, 47715), (360, 47748), (365, 47784), (383, 47874),

Gene: PSullivan_67 Start: 42452, Stop: 41586, Start Num: 31

Candidate Starts for PSullivan_67:

(Start: 24 @42479 has 1 MA's), (29, 42458), (Start: 31 @42452 has 6 MA's), (Start: 42 @42395 has 1 MA's), (43, 42392), (49, 42362), (52, 42353), (78, 42233), (170, 42125), (191, 42056), (222, 41981), (340, 41795), (349, 41765), (384, 41606),

Gene: Parada_66 Start: 42588, Stop: 43298, Start Num: 155

Candidate Starts for Parada_66:

(71, 42354), (113, 42483), (Start: 155 @42588 has 76 MA's), (165, 42615), (184, 42681), (272, 42906), (285, 42939), (303, 42993), (323, 43050), (343, 43101), (344, 43104), (365, 43179),

Gene: Paries_10 Start: 4991, Stop: 5734, Start Num: 152

Candidate Starts for Paries_10:

(Start: 152 @4991 has 16 MA's), (173, 5051), (174, 5054), (184, 5090), (210, 5156), (227, 5201), (232, 5219), (234, 5225), (265, 5303), (288, 5363), (297, 5387), (301, 5396), (313, 5429), (327, 5468), (332, 5477), (345, 5537), (357, 5558), (361, 5576), (362, 5579), (370, 5630), (379, 5678),

Gene: Patt_67 Start: 42268, Stop: 43113, Start Num: 37

Candidate Starts for Patt_67:

(26, 42217), (Start: 37 @42268 has 44 MA's), (Start: 42 @42295 has 1 MA's), (48, 42325), (168, 42553), (170, 42565), (Start: 185 @42613 has 2 MA's), (209, 42679), (328, 42853), (351, 42931), (362, 42958), (367, 42997), (375, 43036), (389, 43096),

Gene: Payneful_64 Start: 43153, Stop: 42311, Start Num: 36

Candidate Starts for Payneful_64:

(Start: 27 @43189 has 1 MA's), (Start: 34 @43174 has 5 MA's), (Start: 36 @43153 has 3 MA's), (Start: 42 @43123 has 1 MA's), (43, 43120), (49, 43090), (52, 43081), (78, 42961), (170, 42853), (191, 42784), (222, 42709), (340, 42523), (349, 42493), (384, 42334),

Gene: Petra_69 Start: 42660, Stop: 43718, Start Num: 37

Candidate Starts for Petra_69:

(1, 41811), (5, 42207), (8, 42426), (10, 42438), (12, 42486), (18, 42534), (Start: 37 @42660 has 44 MA's), (58, 42756), (69, 42813), (Start: 76 @42846 has 1 MA's), (84, 42876), (130, 42990), (166, 43080), (184, 43143), (191, 43167), (205, 43191), (209, 43212), (212, 43218), (266, 43317), (341, 43506), (343, 43518),

Gene: Phalconet_64 Start: 40982, Stop: 41998, Start Num: 37

Candidate Starts for Phalconet_64:

(Start: 37 @40982 has 44 MA's), (Start: 42 @41009 has 1 MA's), (52, 41051), (58, 41078), (Start: 76 @41168 has 1 MA's), (80, 41177), (81, 41189), (84, 41198), (104, 41258), (160, 41354), (170, 41390), (174, 41402), (191, 41459), (209, 41504), (212, 41510), (328, 41735), (340, 41780), (362, 41840),

Gene: PhesterPhotato_76 Start: 45973, Stop: 46719, Start Num: 144

Candidate Starts for PhesterPhotato_76:

(144, 45973), (165, 46012), (175, 46045), (176, 46054), (210, 46144), (227, 46189), (236, 46216), (238, 46222), (255, 46270), (265, 46291), (288, 46351), (297, 46375), (309, 46411), (313, 46417), (323, 46444), (336, 46483), (362, 46567), (383, 46690),

Gene: Philon9_44 Start: 46927, Stop: 46214, Start Num: 156

Candidate Starts for Philon9_44:

(72, 47170), (Start: 156 @46927 has 64 MA's), (162, 46912), (191, 46810), (220, 46720), (295, 46561), (322, 46498), (329, 46468), (363, 46357), (365, 46327), (381, 46246),

Gene: PhorbesPhlower_52 Start: 33687, Stop: 34304, Start Num: 152

Candidate Starts for PhorbesPhlower_52:

(Start: 152 @33687 has 16 MA's), (174, 33747), (183, 33771), (219, 33840), (239, 33888), (253, 33921), (287, 33990), (290, 33999), (342, 34104), (346, 34113), (383, 34278),

Gene: PierreThree_46 Start: 45620, Stop: 44898, Start Num: 156

Candidate Starts for PierreThree_46:

(Start: 156 @45620 has 64 MA's), (171, 45581), (178, 45554), (191, 45503), (217, 45428), (220, 45413), (264, 45329), (295, 45254), (343, 45098), (363, 45050), (365, 45020), (385, 44918),

Gene: Pimento_70 Start: 42707, Stop: 43417, Start Num: 155

Candidate Starts for Pimento_70:

(71, 42473), (113, 42602), (Start: 155 @42707 has 76 MA's), (165, 42734), (184, 42800), (272, 43025), (285, 43058), (303, 43112), (323, 43169), (343, 43220), (344, 43223), (360, 43262), (365, 43298),

Gene: PinkCoffee_61 Start: 44274, Stop: 45227, Start Num: 37

Candidate Starts for PinkCoffee_61:

(Start: 37 @44274 has 44 MA's), (58, 44370), (Start: 76 @44460 has 1 MA's), (184, 44727), (191, 44751), (209, 44796), (212, 44802), (266, 44901), (341, 45012), (360, 45066),

Gene: Pita2_70 Start: 43949, Stop: 43083, Start Num: 31

Candidate Starts for Pita2_70:

(Start: 24 @43976 has 1 MA's), (29, 43955), (Start: 31 @43949 has 6 MA's), (Start: 42 @43892 has 1 MA's), (43, 43889), (49, 43859), (52, 43850), (78, 43730), (170, 43622), (191, 43553), (222, 43478), (340, 43292), (349, 43262), (384, 43103),

Gene: Poenanya_77 Start: 47104, Stop: 47772, Start Num: 145

Candidate Starts for Poenanya_77:

(Start: 145 @47104 has 18 MA's), (165, 47143), (183, 47197), (189, 47224), (221, 47284), (254, 47374), (258, 47386), (276, 47419), (346, 47584), (360, 47617), (365, 47653), (383, 47743),

Gene: PokyPuppy_45 Start: 45563, Stop: 44841, Start Num: 156

Candidate Starts for PokyPuppy_45:

(Start: 156 @45563 has 64 MA's), (171, 45524), (186, 45464), (191, 45446), (217, 45371), (220, 45356), (264, 45272), (295, 45197), (343, 45041), (363, 44993), (365, 44963), (385, 44861),

Gene: Poland_53 Start: 46730, Stop: 46008, Start Num: 156

Candidate Starts for Poland_53:

(Start: 156 @46730 has 64 MA's), (171, 46691), (178, 46664), (191, 46613), (217, 46538), (220, 46523), (264, 46439), (295, 46364), (343, 46208), (363, 46160), (365, 46130), (385, 46028),

Gene: Polka14_78 Start: 47894, Stop: 48562, Start Num: 145

Candidate Starts for Polka14_78:

(Start: 145 @47894 has 18 MA's), (165, 47933), (183, 47987), (189, 48014), (221, 48074), (254, 48164), (258, 48176), (276, 48209), (346, 48374), (360, 48407), (365, 48443), (383, 48533),

Gene: Polkaroo_62 Start: 41192, Stop: 41851, Start Num: 150

Candidate Starts for Polkaroo_62:

(Start: 112 @41102 has 1 MA's), (116, 41111), (Start: 150 @41192 has 1 MA's), (165, 41222), (183, 41276), (189, 41303), (221, 41363), (254, 41453), (258, 41465), (276, 41498), (282, 41513), (346, 41663), (360, 41696), (365, 41732), (383, 41822),

Gene: Polkaroo_59 Start: 38517, Stop: 39569, Start Num: 37

Candidate Starts for Polkaroo_59:

(Start: 37 @38517 has 44 MA's), (Start: 42 @38544 has 1 MA's), (44, 38550), (52, 38586), (79, 38709), (80, 38712), (84, 38733), (134, 38886), (142, 38910), (153, 38928), (341, 39351), (362, 39408), (393, 39561),

Gene: PopTart_60 Start: 40607, Stop: 41515, Start Num: 37

Candidate Starts for PopTart_60:

(Start: 37 @40607 has 44 MA's), (Start: 42 @40634 has 1 MA's), (52, 40676), (58, 40703), (Start: 76 @40793 has 1 MA's), (80, 40802), (84, 40823), (191, 40976), (209, 41021), (212, 41027), (250, 41090), (328, 41252), (340, 41297), (362, 41357),

Gene: PullumCavea_58 Start: 44450, Stop: 45406, Start Num: 37

Candidate Starts for PullumCavea_58:

(17, 44324), (23, 44390), (Start: 37 @44450 has 44 MA's), (58, 44546), (Start: 76 @44636 has 1 MA's), (184, 44906), (191, 44930), (209, 44975), (212, 44981), (266, 45080), (341, 45191), (360, 45245),

Gene: QueenHazel_55 Start: 38490, Stop: 39401, Start Num: 37

Candidate Starts for QueenHazel_55:

(Start: 37 @38490 has 44 MA's), (Start: 42 @38517 has 1 MA's), (44, 38523), (52, 38559), (Start: 76 @38676 has 1 MA's), (81, 38697), (84, 38706), (86, 38709), (139, 38772), (170, 38808), (174, 38820), (180, 38841), (209, 38922), (320, 39108), (328, 39138), (362, 39243),

Gene: Rem711_72 Start: 44535, Stop: 45203, Start Num: 155

Candidate Starts for Rem711_72:

(32, 44103), (48, 44193), (59, 44235), (62, 44241), (64, 44256), (89, 44367), (131, 44487), (Start: 155 @44535 has 76 MA's), (165, 44562), (183, 44616), (291, 44898), (331, 44967), (374, 45120),

Gene: RemRem_47 Start: 44268, Stop: 43546, Start Num: 156

Candidate Starts for RemRem_47:

(Start: 156 @44268 has 64 MA's), (171, 44229), (178, 44202), (191, 44151), (217, 44076), (220, 44061), (264, 43977), (295, 43902), (343, 43746), (363, 43698), (365, 43668), (385, 43566),

Gene: Reptar3000_68 Start: 42257, Stop: 43102, Start Num: 37

Candidate Starts for Reptar3000_68:

(26, 42206), (Start: 37 @42257 has 44 MA's), (Start: 42 @42284 has 1 MA's), (48, 42314), (168, 42542), (170, 42554), (Start: 185 @42602 has 2 MA's), (209, 42668), (328, 42842), (351, 42920), (362, 42947), (367, 42986),

Gene: Rhynn_57 Start: 39880, Stop: 38906, Start Num: 76

Candidate Starts for Rhynn_57:

(Start: 76 @39880 has 1 MA's), (110, 39772), (124, 39727), (159, 39643), (196, 39520), (213, 39466), (221, 39436), (231, 39400), (300, 39241), (302, 39238), (319, 39184), (344, 39082), (362, 39040), (365, 39007),

Gene: Rialto_71 Start: 44794, Stop: 45717, Start Num: 37

Candidate Starts for Rialto_71:

(Start: 37 @44794 has 44 MA's), (Start: 42 @44821 has 1 MA's), (52, 44863), (Start: 76 @44980 has 1 MA's), (80, 44989), (84, 45010), (129, 45076), (170, 45112), (174, 45124), (191, 45181), (209, 45226), (212, 45232), (328, 45457), (330, 45460),

Gene: RitaG_74 Start: 47037, Stop: 47705, Start Num: 145

Candidate Starts for RitaG_74:

(Start: 145 @47037 has 18 MA's), (165, 47076), (183, 47130), (189, 47157), (221, 47217), (254, 47307), (258, 47319), (276, 47352), (346, 47517), (360, 47550), (365, 47586), (383, 47676),

Gene: Rofo_85 Start: 57833, Stop: 58579, Start Num: 155

Candidate Starts for Rofo_85:

(123, 57758), (132, 57782), (Start: 155 @57833 has 76 MA's), (172, 57881), (174, 57890), (176, 57902), (237, 58100), (242, 58115), (268, 58175), (271, 58181), (272, 58184), (278, 58196), (279, 58202), (285, 58217), (323, 58328), (362, 58442), (368, 58487), (375, 58520), (380, 58547), (386, 58568),

Gene: RogerDodger_62 Start: 44572, Stop: 45528, Start Num: 37

Candidate Starts for RogerDodger_62:

(17, 44446), (Start: 37 @44572 has 44 MA's), (58, 44668), (Start: 76 @44758 has 1 MA's), (184, 45028), (191, 45052), (209, 45097), (212, 45103), (266, 45202), (341, 45313), (360, 45367),

Gene: RonRayGun_60 Start: 41425, Stop: 42162, Start Num: 161

Candidate Starts for RonRayGun_60:

(38, 41008), (99, 41266), (102, 41272), (Start: 161 @41425 has 7 MA's), (174, 41467), (194, 41539), (203, 41557), (246, 41683), (252, 41701), (298, 41815), (309, 41851), (324, 41896), (346, 41980), (350, 41989), (352, 41992), (358, 42001), (362, 42019), (388, 42151),

Gene: RoyalG_47 Start: 45104, Stop: 44382, Start Num: 156

Candidate Starts for RoyalG_47:

(Start: 156 @45104 has 64 MA's), (171, 45065), (191, 44987), (217, 44912), (220, 44897), (264, 44813), (295, 44738), (363, 44534), (365, 44504), (385, 44402),

Gene: Ruthiejr_72 Start: 43729, Stop: 44574, Start Num: 37

Candidate Starts for Ruthiejr_72:

(Start: 37 @43729 has 44 MA's), (Start: 42 @43756 has 1 MA's), (48, 43786), (168, 44014), (170, 44026), (Start: 185 @44074 has 2 MA's), (209, 44140), (328, 44314), (351, 44392), (362, 44419), (367, 44458),

Gene: SG4_77 Start: 47569, Stop: 48366, Start Num: 150

Candidate Starts for SG4_77:

(Start: 148 @47566 has 10 MA's), (Start: 150 @47569 has 1 MA's), (165, 47602), (175, 47635), (176, 47644), (188, 47692), (205, 47725), (228, 47794), (251, 47866), (262, 47890), (270, 47905), (328, 48076), (338, 48112), (359, 48178), (362, 48184), (380, 48289), (383, 48307),

Gene: Sam12_46 Start: 44268, Stop: 43546, Start Num: 156

Candidate Starts for Sam12_46:

(Start: 156 @44268 has 64 MA's), (171, 44229), (178, 44202), (191, 44151), (217, 44076), (220, 44061), (264, 43977), (295, 43902), (343, 43746), (363, 43698), (365, 43668), (385, 43566),

Gene: SamScheppers_69 Start: 44109, Stop: 44954, Start Num: 37

Candidate Starts for SamScheppers_69:

(26, 44058), (Start: 37 @44109 has 44 MA's), (Start: 42 @44136 has 1 MA's), (48, 44166), (168, 44394), (170, 44406), (Start: 185 @44454 has 2 MA's), (209, 44520), (328, 44694), (351, 44772), (362, 44799), (367, 44838),

Gene: Sampson_91 Start: 59293, Stop: 59982, Start Num: 155

Candidate Starts for Sampson_91:

(55, 58978), (105, 59167), (120, 59212), (129, 59236), (Start: 155 @59293 has 76 MA's), (183, 59374), (199, 59425), (239, 59551), (255, 59590), (289, 59668), (292, 59680), (305, 59701), (324, 59737), (355, 59818),

Gene: Sanjuju_83 Start: 58188, Stop: 58886, Start Num: 155

Candidate Starts for Sanjuju_83:

(7, 57441), (45, 57810), (61, 57876), (123, 58113), (132, 58137), (Start: 155 @58188 has 76 MA's), (167, 58221), (172, 58236), (176, 58257), (218, 58365), (237, 58425), (271, 58506), (278, 58521), (285, 58542), (333, 58674), (344, 58707), (362, 58749), (368, 58794), (375, 58827), (380, 58854), (386, 58875),

Gene: Sassafras_75 Start: 45926, Stop: 46594, Start Num: 145

Candidate Starts for Sassafras_75:

(Start: 145 @45926 has 18 MA's), (165, 45965), (183, 46019), (189, 46046), (221, 46106), (254, 46196), (258, 46208), (276, 46241), (346, 46406), (360, 46439), (365, 46475), (383, 46565),

Gene: SassyB_60 Start: 40607, Stop: 41515, Start Num: 37

Candidate Starts for SassyB_60:

(Start: 37 @40607 has 44 MA's), (Start: 42 @40634 has 1 MA's), (52, 40676), (58, 40703), (Start: 76 @40793 has 1 MA's), (80, 40802), (84, 40823), (191, 40976), (209, 41021), (212, 41027), (250, 41090), (328, 41252), (340, 41297), (362, 41357),

Gene: Scioto_89 Start: 59143, Stop: 59832, Start Num: 155

Candidate Starts for Scioto_89:

(55, 58828), (105, 59017), (120, 59062), (129, 59086), (Start: 155 @59143 has 76 MA's), (183, 59224), (199, 59275), (239, 59401), (255, 59440), (289, 59518), (292, 59530), (305, 59551), (324, 59587), (355, 59668),

Gene: Scottish_72 Start: 45585, Stop: 46253, Start Num: 145

Candidate Starts for Scottish_72:

(Start: 145 @45585 has 18 MA's), (165, 45624), (183, 45678), (189, 45705), (221, 45765), (254, 45855), (258, 45867), (276, 45900), (346, 46065), (360, 46098), (365, 46134), (383, 46224),

Gene: Sedona_83 Start: 58685, Stop: 59383, Start Num: 155

Candidate Starts for Sedona_83:

(7, 57938), (45, 58307), (61, 58373), (123, 58610), (132, 58634), (Start: 155 @58685 has 76 MA's), (172, 58733), (174, 58742), (176, 58754), (218, 58862), (237, 58922), (271, 59003), (278, 59018), (285, 59039), (333, 59171), (344, 59204), (362, 59246), (368, 59291), (375, 59324), (380, 59351), (386, 59372),

Gene: Shelley_46 Start: 45897, Stop: 45178, Start Num: 156

Candidate Starts for Shelley_46:

(Start: 156 @45897 has 64 MA's), (178, 45831), (187, 45789), (191, 45780), (195, 45774), (220, 45690), (248, 45645), (260, 45612), (264, 45606), (295, 45531), (363, 45327),

Gene: Sidious_64 Start: 44887, Stop: 45681, Start Num: 152

Candidate Starts for Sidious_64:

(Start: 148 @44884 has 10 MA's), (Start: 152 @44887 has 16 MA's), (192, 45019), (194, 45022), (208, 45049), (243, 45166), (309, 45340), (321, 45361), (346, 45457), (366, 45532), (375, 45574),

Gene: Sidious_65 Start: 45678, Stop: 46337, Start Num: 152

Candidate Starts for Sidious_65:

(Start: 152 @45678 has 16 MA's), (183, 45762), (228, 45873), (239, 45903), (275, 45981), (282, 45996), (325, 46086), (327, 46095), (383, 46308),

Gene: SimranZ1_67 Start: 43613, Stop: 44584, Start Num: 37

Candidate Starts for SimranZ1_67:

(12, 43436), (13, 43442), (14, 43451), (15, 43460), (19, 43499), (Start: 37 @43613 has 44 MA's), (55, 43697), (58, 43709), (Start: 76 @43799 has 1 MA's), (81, 43820), (84, 43829), (86, 43832), (104, 43889), (160, 43985), (170, 44021), (174, 44033), (Start: 185 @44069 has 2 MA's), (191, 44090), (205, 44114), (212, 44141), (282, 44249), (328, 44324),

Gene: Sitar_84 Start: 58707, Stop: 59453, Start Num: 155

Candidate Starts for Sitar_84:

(23, 58224), (61, 58395), (123, 58632), (132, 58656), (Start: 155 @58707 has 76 MA's), (172, 58755), (174, 58764), (176, 58776), (237, 58974), (242, 58989), (268, 59049), (271, 59055), (272, 59058), (278, 59070), (279, 59076), (285, 59091), (323, 59202), (362, 59316), (368, 59361), (375, 59394), (380, 59421), (386, 59442),

Gene: Slarp_71 Start: 43637, Stop: 44482, Start Num: 37

Candidate Starts for Slarp_71:

(26, 43586), (Start: 37 @43637 has 44 MA's), (Start: 42 @43664 has 1 MA's), (48, 43694), (168, 43922), (170, 43934), (Start: 185 @43982 has 2 MA's), (209, 44048), (328, 44222), (351, 44300), (362, 44327), (367, 44366),

Gene: Smooch_24 Start: 10992, Stop: 11792, Start Num: 148

Candidate Starts for Smooch_24:

(Start: 148 @10992 has 10 MA's), (Start: 150 @10995 has 1 MA's), (165, 11028), (175, 11061), (176, 11070), (188, 11118), (205, 11151), (228, 11220), (251, 11292), (262, 11316), (270, 11331), (328, 11502), (338, 11538), (359, 11604), (362, 11610), (380, 11715), (383, 11733), (395, 11763),

Gene: Sombrero_47 Start: 44639, Stop: 43917, Start Num: 156

Candidate Starts for Sombrero_47:

(Start: 156 @44639 has 64 MA's), (171, 44600), (178, 44573), (186, 44540), (191, 44522), (217, 44447), (220, 44432), (264, 44348), (295, 44273), (362, 44072), (363, 44069), (385, 43937),

Gene: Spooky_73 Start: 43405, Stop: 44088, Start Num: 185

Candidate Starts for Spooky_73:

(169, 43345), (Start: 185 @43405 has 2 MA's), (207, 43474), (235, 43576), (241, 43597), (253, 43633), (280, 43693), (283, 43705), (290, 43729), (293, 43738), (318, 43810), (329, 43846), (331, 43849), (356, 43927), (372, 44008), (383, 44080),

Gene: Squibbles_46 Start: 45131, Stop: 44409, Start Num: 156

Candidate Starts for Squibbles_46:

(Start: 156 @45131 has 64 MA's), (171, 45092), (178, 45065), (191, 45014), (217, 44939), (220, 44924), (264, 44840), (295, 44765), (343, 44609), (363, 44561), (365, 44531), (385, 44429),

Gene: StAnnes_64 Start: 42680, Stop: 43636, Start Num: 37

Candidate Starts for StAnnes_64:

(Start: 37 @42680 has 44 MA's), (Start: 42 @42707 has 1 MA's), (44, 42713), (52, 42749), (Start: 76 @42866 has 1 MA's), (86, 42899), (133, 42977), (138, 43001), (160, 43037), (164, 43052), (170, 43073), (174, 43085), (191, 43142), (209, 43187), (250, 43250), (263, 43271), (328, 43373), (362, 43478),

Gene: SteveFrench_46 Start: 45344, Stop: 44622, Start Num: 156

Candidate Starts for SteveFrench_46:

(Start: 156 @45344 has 64 MA's), (171, 45305), (191, 45227), (217, 45152), (220, 45137), (264, 45053), (295, 44978), (363, 44774), (365, 44744), (385, 44642),

Gene: StevieRay_65 Start: 41652, Stop: 42314, Start Num: 148

Candidate Starts for StevieRay_65:

(Start: 148 @41652 has 10 MA's), (165, 41685), (183, 41739), (189, 41766), (221, 41826), (254, 41916), (258, 41928), (276, 41961), (346, 42126), (360, 42159), (365, 42195), (383, 42285),

Gene: Sticker17_46 Start: 46412, Stop: 45693, Start Num: 156

Candidate Starts for Sticker17_46:

(Start: 156 @46412 has 64 MA's), (178, 46346), (191, 46295), (195, 46289), (220, 46205), (248, 46160), (264, 46121), (295, 46046), (299, 46037), (363, 45842),

Gene: Stultus_80 Start: 56979, Stop: 57725, Start Num: 155

Candidate Starts for Stultus_80:

(Start: 155 @56979 has 76 MA's), (172, 57027), (174, 57036), (176, 57048), (237, 57246), (242, 57261), (268, 57321), (271, 57327), (272, 57330), (278, 57342), (279, 57348), (285, 57363), (323, 57474), (362, 57588), (365, 57621), (368, 57633), (375, 57666), (380, 57693), (386, 57714),

Gene: Swole_68 Start: 43859, Stop: 42993, Start Num: 31

Candidate Starts for Swole_68:

(Start: 24 @43886 has 1 MA's), (29, 43865), (Start: 31 @43859 has 6 MA's), (Start: 42 @43802 has 1 MA's), (43, 43799), (49, 43769), (52, 43760), (78, 43640), (170, 43532), (191, 43463), (222, 43388), (340, 43202), (349, 43172), (384, 43013),

Gene: Taquito_70 Start: 43842, Stop: 44687, Start Num: 37

Candidate Starts for Taquito_70:

(26, 43791), (Start: 37 @43842 has 44 MA's), (Start: 42 @43869 has 1 MA's), (48, 43899), (168, 44127), (170, 44139), (Start: 185 @44187 has 2 MA's), (209, 44253), (328, 44427), (351, 44505),

(362, 44532), (367, 44571),

Gene: Teal_46 Start: 46880, Stop: 46161, Start Num: 156

Candidate Starts for Teal_46:

(Start: 156 @46880 has 64 MA's), (178, 46814), (187, 46772), (191, 46763), (195, 46757), (220, 46673), (248, 46628), (260, 46595), (264, 46589), (295, 46514), (363, 46310),

Gene: Teatealatte_43 Start: 45553, Stop: 44837, Start Num: 156

Candidate Starts for Teatealatte_43:

(Start: 156 @45553 has 64 MA's), (162, 45538), (191, 45436), (220, 45346), (223, 45340), (295, 45187), (322, 45124), (329, 45094), (381, 44872),

Gene: Teech_43 Start: 45354, Stop: 44638, Start Num: 156

Candidate Starts for Teech_43:

(Start: 156 @45354 has 64 MA's), (162, 45339), (191, 45237), (220, 45147), (223, 45141), (295, 44988), (322, 44925), (329, 44895), (381, 44673),

Gene: Thespis_62 Start: 40418, Stop: 41080, Start Num: 148

Candidate Starts for Thespis_62:

(Start: 112 @40337 has 1 MA's), (116, 40346), (125, 40373), (Start: 148 @40418 has 10 MA's), (165, 40451), (183, 40505), (189, 40532), (221, 40592), (254, 40682), (258, 40694), (276, 40727), (346, 40892), (360, 40925), (365, 40961), (383, 41051),

Gene: Thing3_10 Start: 5311, Stop: 6054, Start Num: 152

Candidate Starts for Thing3_10:

(Start: 152 @5311 has 16 MA's), (173, 5371), (174, 5374), (184, 5410), (210, 5476), (227, 5521), (232, 5539), (234, 5545), (265, 5623), (288, 5683), (297, 5707), (301, 5716), (313, 5749), (327, 5788), (332, 5797), (345, 5857), (357, 5878), (361, 5896), (362, 5899), (370, 5950), (379, 5998),

Gene: Thing3_86 Start: 58360, Stop: 59106, Start Num: 155

Candidate Starts for Thing3_86:

(123, 58285), (132, 58309), (Start: 155 @58360 has 76 MA's), (172, 58408), (174, 58417), (176, 58429), (237, 58627), (242, 58642), (268, 58702), (271, 58708), (272, 58711), (278, 58723), (279, 58729), (285, 58744), (323, 58855), (362, 58969), (368, 59014), (375, 59047), (380, 59074), (386, 59095),

Gene: Tiamoceli_4 Start: 2479, Stop: 3267, Start Num: 40

Candidate Starts for Tiamoceli_4:

(Start: 40 @2479 has 1 MA's), (Start: 76 @2644 has 1 MA's), (143, 2791), (164, 2833), (200, 2935), (206, 2950), (328, 3043), (337, 3067), (381, 3259),

Gene: Tote_65 Start: 41126, Stop: 40260, Start Num: 31

Candidate Starts for Tote_65:

(Start: 24 @41153 has 1 MA's), (29, 41132), (Start: 31 @41126 has 6 MA's), (Start: 42 @41069 has 1 MA's), (43, 41066), (49, 41036), (52, 41027), (78, 40907), (170, 40799), (191, 40730), (222, 40655), (340, 40469), (349, 40439), (384, 40280),

Gene: Tredge_43 Start: 45553, Stop: 44837, Start Num: 156

Candidate Starts for Tredge_43:

(Start: 156 @45553 has 64 MA's), (162, 45538), (191, 45436), (220, 45346), (223, 45340), (295, 45187), (322, 45124), (329, 45094), (381, 44872),

Gene: TripleJ_61 Start: 37250, Stop: 37999, Start Num: 155

Candidate Starts for TripleJ_61:

(Start: 155 @37250 has 76 MA's), (163, 37274), (165, 37277), (175, 37310), (176, 37319), (182, 37334), (198, 37382), (215, 37415), (231, 37466), (242, 37499), (271, 37565), (278, 37580), (285, 37601), (303, 37655), (343, 37763), (344, 37766), (368, 37853),

Gene: Trouble_68 Start: 43948, Stop: 43082, Start Num: 34

Candidate Starts for Trouble_68:

(Start: 27 @43963 has 1 MA's), (Start: 34 @43948 has 5 MA's), (Start: 36 @43927 has 3 MA's), (Start: 42 @43894 has 1 MA's), (43, 43891), (49, 43861), (52, 43852), (78, 43732), (170, 43624), (191, 43555), (222, 43480), (340, 43294), (349, 43264), (384, 43105),

Gene: Tweety_66 Start: 43468, Stop: 44124, Start Num: 155

Candidate Starts for Tweety_66:

(86, 43291), (92, 43306), (95, 43315), (126, 43411), (Start: 155 @43468 has 76 MA's), (183, 43549), (189, 43576), (221, 43636), (254, 43726), (258, 43738), (276, 43771), (346, 43936), (360, 43969), (365, 44005), (381, 44086), (383, 44095),

Gene: Ubuntu_67 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for Ubuntu_67:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: UmaThurman_67 Start: 42612, Stop: 43637, Start Num: 37

Candidate Starts for UmaThurman_67:

(3, 42123), (4, 42144), (5, 42156), (8, 42375), (10, 42387), (12, 42435), (Start: 37 @42612 has 44 MA's), (58, 42708), (69, 42765), (Start: 76 @42798 has 1 MA's), (84, 42828), (98, 42861), (130, 42942), (166, 43032), (168, 43038), (191, 43119), (212, 43170), (308, 43326), (341, 43425),

Gene: Utz_60 Start: 42126, Stop: 43184, Start Num: 37

Candidate Starts for Utz_60:

(8, 41889), (10, 41901), (12, 41949), (Start: 37 @42126 has 44 MA's), (58, 42222), (69, 42279), (Start: 76 @42312 has 1 MA's), (84, 42342), (130, 42456), (166, 42546), (180, 42597), (184, 42609), (191, 42633), (205, 42657), (209, 42678), (212, 42684), (341, 42972),

Gene: Vasanti_62 Start: 41618, Stop: 42619, Start Num: 37

Candidate Starts for Vasanti_62:

(2, 41102), (22, 41525), (30, 41585), (Start: 37 @41618 has 44 MA's), (55, 41702), (58, 41714), (69, 41771), (Start: 76 @41804 has 1 MA's), (84, 41834), (141, 41948), (184, 42044), (191, 42068), (209, 42113), (212, 42119), (266, 42218), (328, 42359), (341, 42407),

Gene: Venti_58 Start: 37622, Stop: 38488, Start Num: 114

Candidate Starts for Venti_58:

(97, 37571), (99, 37586), (Start: 114 @37622 has 3 MA's), (Start: 152 @37721 has 16 MA's), (165, 37751), (175, 37784), (176, 37793), (188, 37841), (205, 37874), (228, 37943), (251, 38015), (262, 38039), (270, 38054), (328, 38225), (338, 38261), (359, 38327), (362, 38333), (380, 38438), (383, 38456),

Gene: Verity_88 Start: 60390, Stop: 61079, Start Num: 155

Candidate Starts for Verity_88:

(129, 60333), (Start: 155 @60390 has 76 MA's), (183, 60471), (289, 60765), (292, 60777), (355, 60915), (360, 60933), (374, 61008), (375, 61014),

Gene: ViaConlectus_88 Start: 58070, Stop: 58717, Start Num: 155

Candidate Starts for ViaConlectus_88:

(100, 57944), (117, 57989), (124, 58013), (Start: 155 @58070 has 76 MA's), (183, 58151), (224, 58247), (239, 58292), (275, 58370), (282, 58385), (312, 58460), (327, 58484), (383, 58697),

Gene: Walrus_66 Start: 42197, Stop: 43261, Start Num: 37

Candidate Starts for Walrus_66:

(5, 41744), (8, 41963), (10, 41975), (12, 42023), (Start: 37 @42197 has 44 MA's), (58, 42293), (69, 42350), (Start: 76 @42383 has 1 MA's), (84, 42413), (130, 42527), (166, 42617), (184, 42680), (191, 42704), (209, 42749), (212, 42755), (266, 42854), (341, 43043),

Gene: Watermelon_68 Start: 43252, Stop: 42389, Start Num: 34

Candidate Starts for Watermelon_68:

(Start: 27 @43267 has 1 MA's), (Start: 34 @43252 has 5 MA's), (Start: 36 @43231 has 3 MA's), (Start: 42 @43201 has 1 MA's), (43, 43198), (49, 43168), (52, 43159), (78, 43039), (170, 42931), (191, 42862), (222, 42787), (340, 42601), (349, 42571), (384, 42412),

Gene: Webster2_67 Start: 44904, Stop: 45578, Start Num: 145

Candidate Starts for Webster2_67:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396), (348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: WheatThin_65 Start: 42576, Stop: 43286, Start Num: 155

Candidate Starts for WheatThin_65:

(71, 42342), (113, 42471), (Start: 155 @42576 has 76 MA's), (165, 42603), (184, 42669), (272, 42894), (285, 42927), (303, 42981), (323, 43038), (343, 43089), (344, 43092), (365, 43167),

Gene: Wheeler_71 Start: 44519, Stop: 43659, Start Num: 34

Candidate Starts for Wheeler_71:

(Start: 27 @44534 has 1 MA's), (Start: 34 @44519 has 5 MA's), (Start: 36 @44498 has 3 MA's), (Start: 42 @44468 has 1 MA's), (43, 44465), (49, 44435), (52, 44426), (78, 44306), (170, 44198), (191, 44129), (222, 44054), (340, 43868), (349, 43838), (384, 43679),

Gene: Whitty_59 Start: 41222, Stop: 41959, Start Num: 161

Candidate Starts for Whitty_59:

(38, 40805), (99, 41063), (102, 41069), (Start: 161 @41222 has 7 MA's), (174, 41264), (194, 41336), (203, 41354), (246, 41480), (252, 41498), (298, 41612), (309, 41648), (324, 41693), (346, 41777), (350, 41786), (352, 41789), (358, 41798), (362, 41816), (388, 41948),

Gene: Wintermute_71 Start: 43867, Stop: 44712, Start Num: 37

Candidate Starts for Wintermute_71:

(26, 43816), (Start: 37 @43867 has 44 MA's), (Start: 42 @43894 has 1 MA's), (48, 43924), (168, 44152), (170, 44164), (Start: 185 @44212 has 2 MA's), (209, 44278), (328, 44452), (351, 44530), (362, 44557), (367, 44596),

Gene: Wishmaker_62 Start: 44916, Stop: 45578, Start Num: 155

Candidate Starts for Wishmaker_62:

(50, 44574), (67, 44655), (77, 44700), (82, 44724), (99, 44775), (119, 44829), (Start: 145 @44904 has 18 MA's), (147, 44907), (Start: 155 @44916 has 76 MA's), (165, 44943), (230, 45117), (257, 45195), (259, 45201), (273, 45225), (281, 45234), (292, 45276), (332, 45360), (339, 45363), (346, 45396),

(348, 45402), (352, 45408), (366, 45471), (374, 45507), (379, 45534), (381, 45549), (383, 45558),

Gene: Woes_46 Start: 46931, Stop: 46212, Start Num: 156

Candidate Starts for Woes_46:

(Start: 156 @46931 has 64 MA's), (178, 46865), (191, 46814), (195, 46808), (220, 46724), (248, 46679), (264, 46640), (295, 46565), (363, 46361),

Gene: Xula_54 Start: 38111, Stop: 39022, Start Num: 37

Candidate Starts for Xula_54:

(Start: 37 @38111 has 44 MA's), (Start: 42 @38138 has 1 MA's), (44, 38144), (52, 38180), (Start: 76 @38297 has 1 MA's), (81, 38318), (84, 38327), (86, 38330), (139, 38393), (170, 38429), (174, 38441), (180, 38462), (209, 38543), (320, 38729), (328, 38759), (362, 38864),

Gene: Y10_68 Start: 43844, Stop: 44689, Start Num: 37

Candidate Starts for Y10_68:

(Start: 37 @43844 has 44 MA's), (Start: 42 @43871 has 1 MA's), (48, 43901), (168, 44129), (170, 44141), (Start: 185 @44189 has 2 MA's), (209, 44255), (328, 44429), (351, 44507), (362, 44534), (367, 44573),

Gene: Y2_68 Start: 43844, Stop: 44689, Start Num: 37

Candidate Starts for Y2_68:

(Start: 37 @43844 has 44 MA's), (Start: 42 @43871 has 1 MA's), (48, 43901), (168, 44129), (170, 44141), (Start: 185 @44189 has 2 MA's), (209, 44255), (328, 44429), (351, 44507), (362, 44534), (367, 44573),

Gene: ZenTime222_66 Start: 42173, Stop: 42910, Start Num: 161

Candidate Starts for ZenTime222_66:

(38, 41756), (99, 42014), (102, 42020), (Start: 161 @42173 has 7 MA's), (174, 42215), (194, 42287), (203, 42305), (246, 42431), (252, 42449), (298, 42563), (309, 42599), (324, 42644), (346, 42728), (350, 42737), (352, 42740), (358, 42749), (362, 42767), (388, 42899),

Gene: Zipp_89 Start: 60361, Stop: 61050, Start Num: 155

Candidate Starts for Zipp_89:

(129, 60304), (Start: 155 @60361 has 76 MA's), (183, 60442), (289, 60736), (292, 60748), (355, 60886), (360, 60904), (374, 60979), (375, 60985),